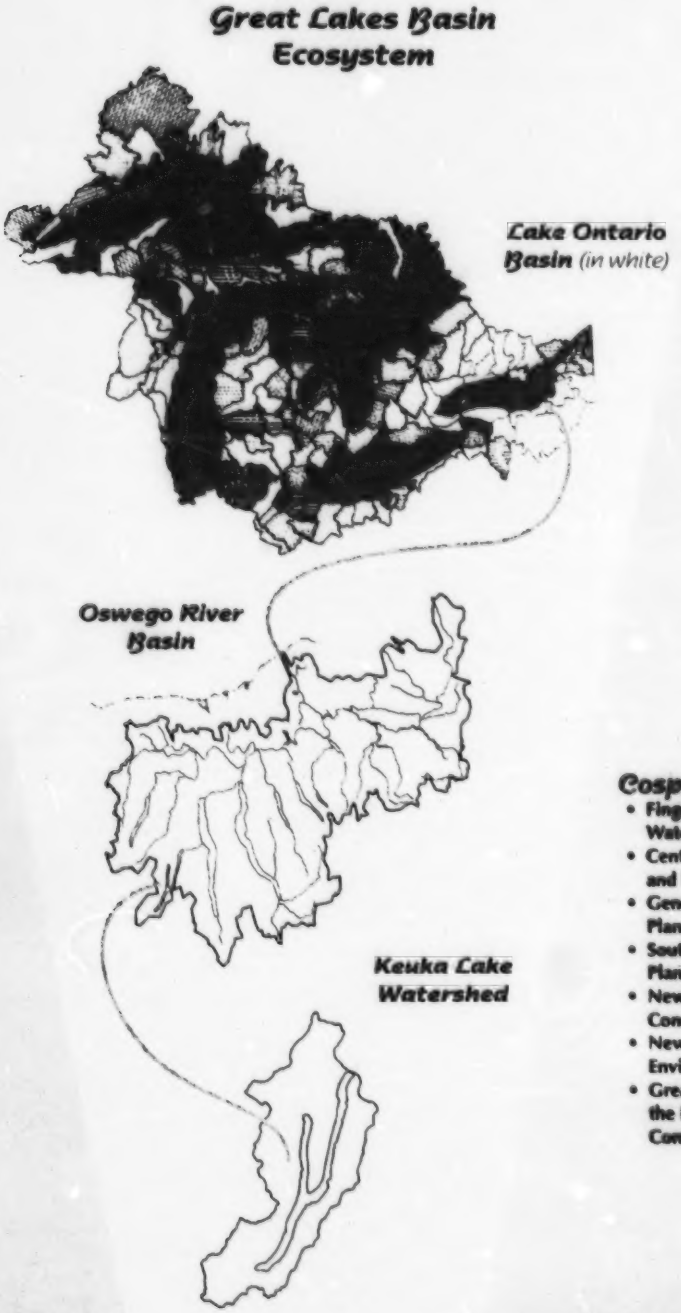
Linking Local Watershed Management Efforts

Across the Lake Ontario Basin



1997
Based on the 5th Annual Conference held in Rochester, New York
Oct. 18-19, 1996

Cosponsored by:

- Finger Lakes—Lake Ontario Watershed Protection Alliance
- Central New York Regional Planning and Development Board
- Genesee—Finger Lakes Regional Planning Board
- Southern Tier Central Regional Planning and Development Board
- New York State Soil and Water Conservation Committee
- New York Department of Environmental Conservation
- Great Lakes Water Quality Board of the International Joint Commission

Great Lakes Basin Ecosystem
U.S. Environmental Protection Agency (EPA)
Environment Canada
International Joint Commission (IJC)
Great Lakes Commission (GLC)
Other National Agencies
Great Lakes Fishery Commission (GLFC)
Finger Lakes Watershed
Watershed Action Plans
Finger Lakes-Lake Ontario Watershed Protection Alliance (FL-LOWPA)
Regional Planning and Economic Development Boards
Other Regional Alliances
New York State Agencies
Lake Associations
Keuka Lake Watershed
Towns
Counties
Other Stakeholder Groups

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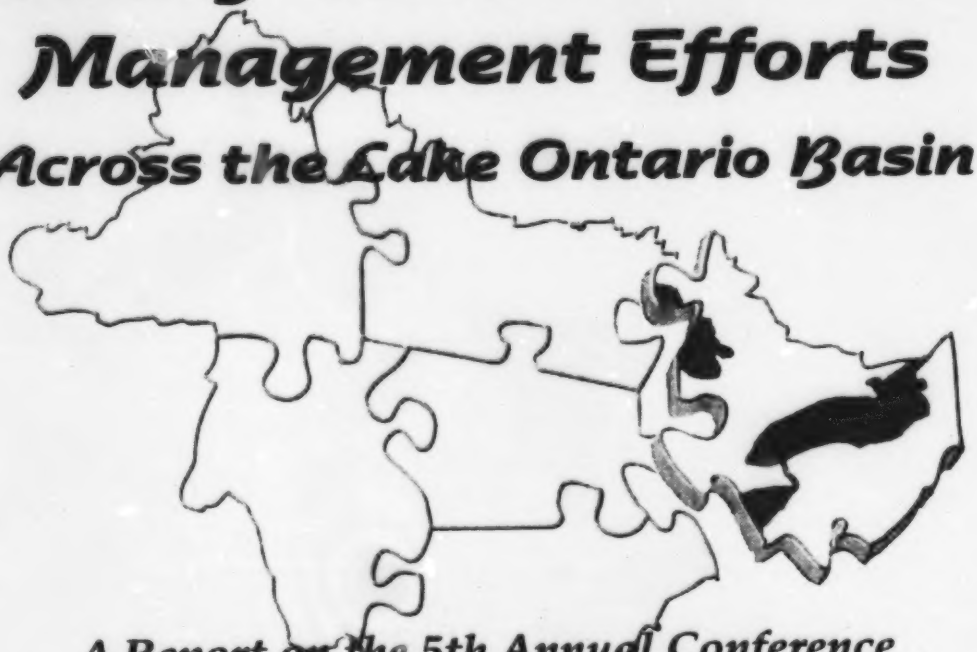
Linking Local Watershed Management Efforts Across the Lake Ontario Basin



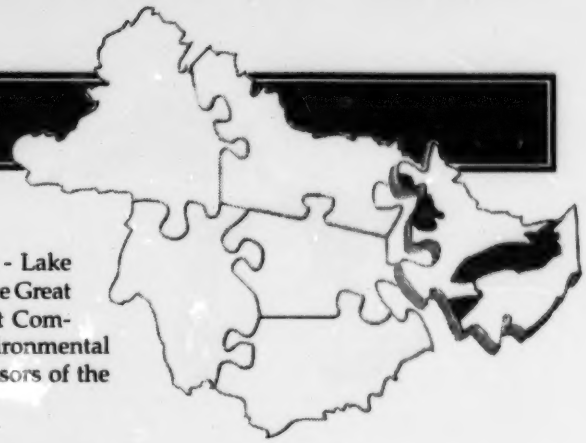
A Report on the 5th Annual Conference
October 18-19, 1996
Rochester Institute of Technology
Rochester, NY

Prepared by:

- **Water Resources Board of the Finger Lakes - Lake Ontario Watershed Protection Alliance**
- **Great Lakes Water Quality Board of the International Joint Commission**
- **New York State Department of Environmental Conservation**

June, 1997

Acknowledgments



The Water Resources Board of the Finger Lakes - Lake Ontario Watershed Protection Alliance (FL-LOWPA), the Great Lakes Water Quality Board of the International Joint Commission, and the New York State Department of Environmental Conservation would like to thank additional co-sponsors of the conference, including:

- Central New York Regional Planning & Development Board
- Genesee/Finger Lakes Regional Planning Council
- Southern Tier Central Regional Planning & Development Board
- New York State Soil and Water Conservation Committee

The Water Resources Board also thanks the New York State Legislature for financial support of its program, thereby making the conference possible, and the Finger Lakes Association, Inc. of Penn Yan, NY for administrative support. Special thanks go to the many speakers, facilitators, moderators, resource people and panelists who made significant contributions to the conference program. Finally, special thanks are due to all members of the Conference Steering Committee, which organized the conference and helped prepare this report, and proved an interagency, cooperative effort is not only possible, but advantageous.

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Design, layout and printing by Communications Services, New York State Agricultural Experiment Station, Geneva, NY 14456-0462. Cover concept by Bruce Jamieson, Great Lakes Regional Office, International Joint Commission.

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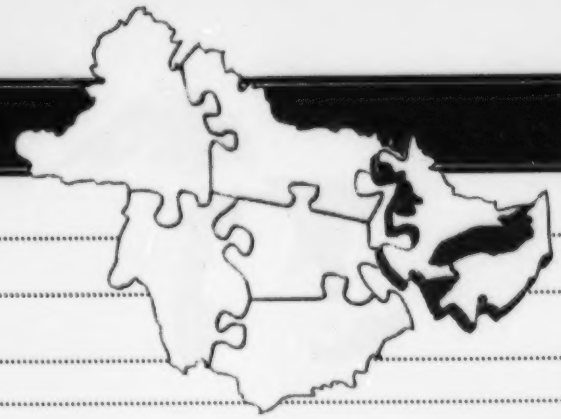

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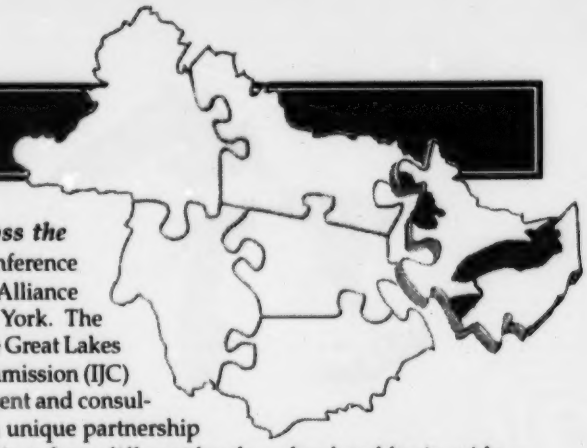
"The management of the Lake Ontario basin sometimes seems like a really advanced jigsaw puzzle ... The more of the pieces that we can fit together, the clearer understanding we'll have of what needs to be done and how to do it effectively and economically."

—The Honorable George D. Maziarz

Executive Summary



Linking Local Watershed Management Efforts across the Lake Ontario Basin was the title of the 5th annual conference of the Finger Lakes-Lake Ontario Watershed Protection Alliance (FL-LOWPA) held October 18-19, 1996 in Rochester, New York. The conference also functioned as the first public meeting of the Great Lakes Water Quality Board (WQB) of the International Joint Commission (IJC) under the IJC's revised policy to improve public involvement and consultation in its affairs. The conference was the product of a unique partnership between two water quality entities representing perspectives from different levels — local and basin-wide — which saw benefits in meeting together. FL-LOWPA is an alliance of 24 counties in New York's Lake Ontario Basin committed to improving the health of the region's watersheds based on local, coordinated programs. The WQB is the principal advisor to the IJC on all matters relating to the Great Lakes Water Quality Agreement. The Board is made up of senior program managers from state, provincial and federal regulatory and resource management agencies.

Purpose and Structure

A primary purpose of the conference was to provide a forum for the exchange of ideas pertaining to watershed management between those in government agencies responsible for the development of basinwide management concepts and initiatives, and those working at the local level to implement programs. The conference was intended to provide a rare opportunity for these groups working on resource management at varying levels to discuss how they might reinforce and compliment each other's work to strengthen watershed management in the Lake Ontario basin. Designed to be action-oriented, two additional goals of the conference were to 1) identify priority obstacles to cooperative management of watersheds and 2) identify actions to overcome those obstacles, with commitments from responsible parties to specific actions where appropriate.

The program included:

- a public dialogue between the Water Resources Board, the governing body of FL-LOWPA, and the WQB to share information on their unique roles and identify ways to support each other;
- a public reception with 29 water quality exhibits and an address by U.S. IJC Commissioner Alice Chamberlin on IJC water quality priorities; and
- a public conference featuring speakers, working breakout groups, and an interactive panel discussion. More than 120 people representing a mix of county, regional, state, provincial, and federal regulatory or resource management agencies; local officials; agricultural representatives; academic institutions; New York State legislative offices; environmental organizations; county water quality advisory committees; consultants; and concerned citizens attended the program.

Obstacles to Cooperative Watershed Management

Obstacles to cooperative watershed management were identified through six geographically-based break-out groups. High priority obstacles identified include the following:

- lack of public awareness and commitment to a shared vision among stakeholders
- insufficient funds and resources at the local level
- insufficient leadership capacity at the local level
- insufficient coordination of responsibilities and priority-setting across watersheds
- lack of incentives to facilitate collaboration
- lack of technical guidance and information on which to base management decisions

Strategies to Overcome Obstacles

Actions to overcome these obstacles were identified by the breakout groups and further developed during an interactive panel discussion with audience participation. The panel represented a broad range of expertise and interests, including local, state and federal agencies, agriculture, a non-profit environmental organization, academia, and the New York State legislature.

To increase public awareness and shared commitment among stakeholders, more **investment in education and public involvement** efforts is needed. Recommendations include:

- increasing funding available for education and public involvement programs
- committing competent professionals to public education, public involvement, and facilitation
- targeting audiences and tailoring education and involvement efforts to their specific needs
- providing equal access to information and decision making processes for all stakeholders
- providing legislators with quantified, technical information to help them justify their support of watershed management activities
- making linkages between a healthy local economy and clean water to underscore the win-win of watershed management
- strengthening interdisciplinary programs at the university level to develop future resource managers and community leaders with the integrative skills necessary for watershed problem-solving.

Representatives from three area universities agreed to take responsibility for the latter.

Strategic planning was recommended as a strategy to address the obstacle of insufficient funding and resources at the local level. Strategic plans emphasize clear, consensus-based priorities; cost-saving alternatives; integration of resources; and a timeline for implementation. Emphasis should be on resourcefulness and efficiency. Requests for funding can be made under a collaborative umbrella and resources can be pooled to implement plans. To assist communities lacking planners or resources for strategic planning, agencies should dedicate staff on a watershed basis to facilitate community-based strategic planning. New York State regional planning boards and county planning agencies may best be able to fill this role.

To address insufficient leadership capacity at the local level, **leadership programs** should be expanded. Resources for leadership development may be available through local universities, civic organizations and the business sector. Organizations may be able to dovetail efforts to meet mutual goals. Two model programs include Leadership Cayuga and Leadership Rochester. Cornell Cooperative Extension is a statewide resource available for leadership development.

Support of **consensus-based, bottom-up watershed initiatives** is recommended to help overcome the lack of common priorities and fragmentation of responsibility across watersheds. All organizations and agencies must be involved in a dialogue process to foster mutual understanding of roles and interests, and to develop support for watershed management decisions. Agencies and authorities must be flexible in their roles in a collaborative process in order to include others. Memoranda of Understanding and the organization of a Council of Governments (CoG) are tools that can clarify roles and relationships, and provide incentives for collaboration. Lead agencies (or parties) should be identified for individual projects undertaken by a watershed group.

Sharing of information and expanding monitoring and data collection programs to the watershed unit are means for enhancing the availability of technical information. New York State Department of Environmental Conservation (DEC) Regional Offices can offer technical guidance to communities preparing watershed management plans; DEC Region 8 (Avon office) made a commitment to this action. DEC Division of Water will encourage information exchange between communities with similar interests and concerns. The need for high quality, watershed-based technical information should be better communicated to research institutions, legislatures, and stakeholders.

Recommended Areas for Action

It was the general conclusion of the conference that responsibility for the future health of New York State's watersheds rests mainly with local communities, supported by government entities at multiple levels. FL-LOWPA, in cooperation with its member counties and local, regional, state and federal organizations, can facilitate cooperative watershed management in the Lake Ontario basin by supporting:

- sharing of technical and program information
- public education and involvement forums
- community-based strategic planning
- local leadership development
- grassroots initiatives to coordinate priorities across watersheds

The WQB of the IJC has a strengthened commitment resulting from the conference to help foster commu-

nication between basinwide and local entities, including:

- exploring greater use of video conferences
- fostering cooperative learning processes
- distributing lists of resources and experts
- updating and widely distributing reports

The WQB will also help link institutionally separate issues, such as water quality, habitat, and lake levels, to provide a conceptual umbrella to assist local ecosystem-based watershed planning.

Specific Recommendations

The Conference Steering Committee also recommended the following to improve the roles of FL-LOWPA and the WQB in facilitation of cooperative watershed management:

1. It is recommended that FL-LOWPA continue to improve its conference cycle by using the model from the 1996 Lake Ontario basin forum and applying it to the subwatershed level, including Finger Lakes and river basins. The model guides a community-based process to stimulate watershed visions and goals, and to evaluate strategies for meeting goals. It is recommended that FL-LOWPA members take ownership of the output from local conferences by 1) using the output from these forums to continuously improve current watershed management strategies for the watersheds they represent and 2) ensuring the implementation of specific conference recommendations where appropriate. FL-LOWPA's five-year conference cycle should be coordinated with the IJC so that, every fifth year, the forum is co-sponsored by FL-LOWPA and the IJC's WQB to bring together local and regional perspectives for a basinwide conference on Lake Ontario (see recommendation 4 below).

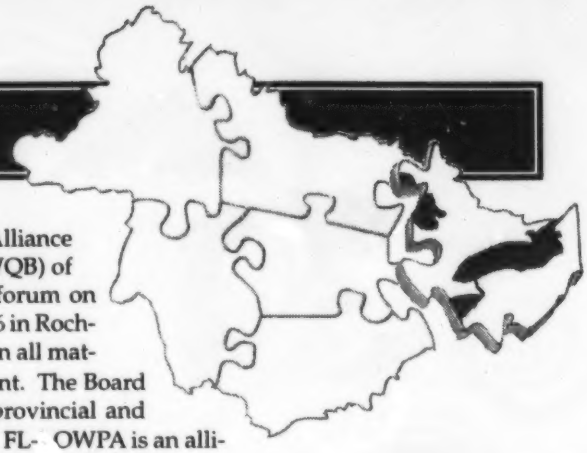
2. It is further recommended that FL-LOWPA advocate the use of facilitated processes for community-based, cooperative watershed management. Recognizing that resources are not consistently available at the local level for facilitated processes, FL-LOWPA should provide training to its membership in the cooperative watershed management model demonstrated at the 1996 conference and in facilitation methods.

3. It is recommended that FL-LOWPA members take responsibility for bringing basinwide information and perspectives from regional entities, such as the IJC and the Lake Ontario Lakewide Management Plan (LaMP), to discussion at the local level. As a starting point, FL-LOWPA representatives can offer the information in the October 18-19, 1996 conference report to cooperators involved in grassroots watershed management and planning efforts.

4. It is recommended that the IJC use its review and evaluation role to convene LaMP, Remedial Action Plan (RAP), fishery management, and other watershed stakeholders around Lake Ontario to review progress collectively and promote integration/cooperation. Perhaps the IJC could convene one such meeting/forum on each of the five Great Lakes during a five-year, iterative cycle. Advantages of a five-year, iterative review cycle would be: one Great Lake is a realistic scale to review progress and the need for integration; such a meeting/forum would create efficiencies for the IJC and state/provincial and federal governments; it would foster lakewide alliances (i.e., it could demonstrate the importance and need for local watershed efforts to achieve lakewide goals and objectives, and that some impairments in Areas of Concern like fish consumption advisories cannot be solved by RAPs alone and will require whole lake action through LaMPs); and such a meeting/forum would serve as a good mechanism to celebrate successes and measure incremental progress (using a common set of indicators) consistent with practical application of an ecosystem approach and watershed management. FL-LOWPA should be a co-sponsor of the IJC meeting/forum for Lake Ontario.

5. It is recommended that the IJC update or re-release the work of its Pollution from Land Use Activities Reference Group (PLUARG). Many people felt the PLUARG work is still relevant and timely, considering the current emphasis on watershed planning and management. The IJC could recommend that the federal, state, provincial, and local governments use the PLUARG report as a benchmark to measure progress in restoring waters within Lake Ontario and its basin. Perhaps the IJC could act as a facilitator/resource available to agencies in interpreting and applying the findings and recommendations of PLUARG.

Introduction



The Finger Lakes - Lake Ontario Watershed Protection Alliance (FL-LOWPA) and Great Lakes Water Quality Board (WQB) of the International Joint Commission (IJC) held a joint forum on cooperative watershed management October 18-19, 1996 in Rochester, NY. The WQB is the principal advisor to the IJC on all matters relating to the Great Lakes Water Quality Agreement. The Board is made up of senior program managers from state, provincial and federal regulatory and resource management agencies. FL- OWPA is an alliance of 24 counties in New York State's Lake Ontario Basin . ommitted to improving and preserving the health of the region's watersheds. The Water Resources Board (WRB) is the governing body of FL-LOWPA, and is comprised of representatives from county-level resource management agencies. FL-LOWPA has held annual public conferences on local watershed management since 1991. The 1996 forum was a regional event building upon prior local forums; it also served as the first public meeting of the WQB under the IJC's revised policy to improve public involvement/consultation. The title of the 1996 conference was *Linking Local Watershed Management Efforts across the Lake Ontario Basin*.

The Conference Process

FL-LOWPA's annual public forum is designed to encourage dialogue about the future desired states of water resources within the Finger Lakes - Lake Ontario region, and management strategies to help achieve those desired states. This conference is designed to cycle throughout the 24-county program area, each year focusing on two or more neighboring lake watersheds of interest. It is expected that, every five years, each conference site will be revisited to track progress and reconsider directions in watershed management (see Figure 1).

Target audiences for the conference series are public officials; agricultural producers; recreational users; lakeshore and watershed residents; scientists and researchers; educators; environmental groups; lake associations; developers; resource managers; business owners; and all others who have a stake in the region's water resources. A broad range of viewpoints is sought intentionally to reflect the many interests inherent in watershed management. Each conference devotes a major portion of the program to both facilitated discussion in small groups and whole audience participation to improve communication and understanding among diverse stakeholders.

The focus of the 1994 (Otisco, Owasco, and Skaneateles Lakes watersheds) and 1995 (Canandaigua and Keuka Lakes watersheds) programs was ecosystem and community-based approaches to watershed management. The 1996 conference advanced these notions within the framework of coordinating local watershed management efforts across the Lake Ontario basin ecosystem. The joint sponsorship of the 1996 conference by FL-LOWPA and the WQB was mutually beneficial. The WQB is responsible for developing and reviewing basinwide management concepts and initiatives. The WQB was seeking practical feedback about obstacles and successes in community-based watershed management from those working at the local level to implement programs. In turn, FL-LOWPA sought clarification of basin-level perspectives and priorities, as represented by the WQB, at its annual conference.

Structure of the 5th Annual Conference

The two-day event featured a dialogue on Friday, October, 18 between the WQB and FL-LOWPA. Together, and with an audience of about 50, the two groups grappled with questions about how best to apply basinwide management concepts at the local level and, alternatively, how best to coordinate local programs to result in basinwide protection (see page 8). Friday's dialogue was followed by a public reception with exhibits from 29 organizations (see page 42). IJC Commissioner Alice Chamberlin spoke on the IJC's water quality priorities (see page 32).

Saturday, October 19 was the public conference (see page 51). In his opening remarks, New York State Senator George Maziarz offered the process of putting together a jigsaw puzzle as a metaphor for watershed management, a theme which was revisited throughout the conference sessions (see text of speech

page 6). Other presentations included an overview of FL-LOWPA and its vision for coordinated watershed management in the Lake Ontario basin, given by James Skaley, Chair of FL-LOWPA's Water Resources Board (see page 34). Gerry Mikol, Director of New York State Department of Environmental Conservation (DEC) Region 9, gave an introduction to the Lake Ontario Lakewide Management Plan (LaMP) and DEC's Basin Team approach to citizen involvement (see page 36). Bill Muszynski, Deputy Regional Administrator for U.S. Environmental Protection Agency (EPA) Region II, gave a luncheon address on EPA's community-based environmental initiatives (see page 39).

An important portion of the Saturday program was dedicated to small, working groups and feedback on their findings. Six breakout groups identified priority obstacles to cooperative watershed management and strategies to overcome those obstacles. The breakout groupings were "nested," in that each represented a distinct, drainage sub-unit of the Lake Ontario watershed, but all were related as a function of being either upstream or downstream of each other and/or by being part of a more comprehensive basin ecosystem (see page 10).

The written output from each breakout group was displayed during an exhibit and networking session. During this time, a group of facilitators and resource people met to synthesize the sizable output from the six groups into a short list of priority obstacles and recommended actions to be addressed during an afternoon interactive panel discussion. The afternoon panel included representatives from local, state, and federal level agencies (U.S. and Canadian); agriculture; a non-profit environmental organization; the Great Lakes research community; and the New York State Legislature. The panel discussion was professionally moderated, with audience participation (see page 26).

Expected Outcomes

Some expected outcomes of the conference included:

Clearer understanding of roles and relationships at multiple levels of water resources management (local, regional, state, provincial, federal and international). This was accomplished through: the Friday dialogue and reception with exhibits; presentations from IJC, DEC, EPA, and FL-LOWPA; and the interactive breakout group and panel discussions. New relationships were fostered through opportunities for networking and sharing of ideas.

Identification of priority obstacles to cooperative watershed management, as defined by the six breakout groups.

Suggested actions to overcome obstacles, as defined by the breakout groups and developed further through the interactive panel, with commitments to action in some areas.

Recommendations to improve the facilitation of cooperative watershed management in the Lake Ontario basin which can guide FL-LOWPA, WQB, and other organizations with an interest in water resources, into the next century.

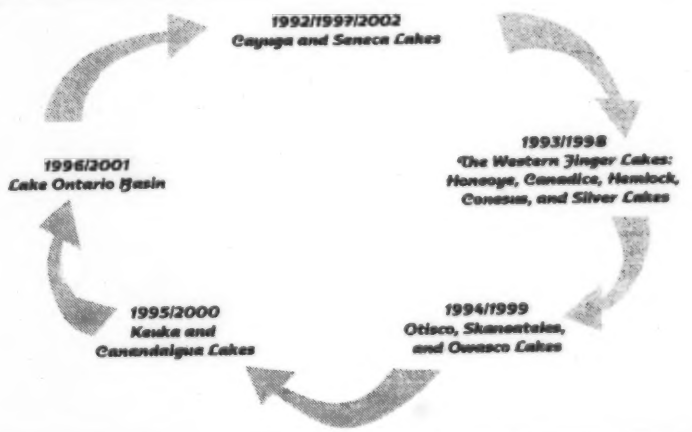
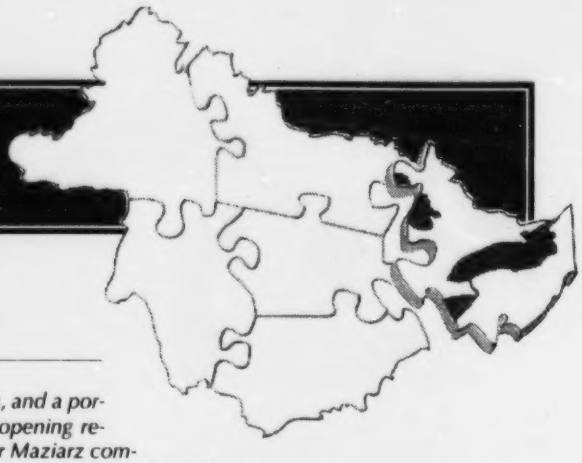


Figure 1. Five-year conference cycle of the Finger Lakes-Lake Ontario Watershed Protection Alliance.

The Puzzle of Watershed Management



The Honorable George D. Maziarz
61st District, New York State Senate

George D. Maziarz represents the 61st District (Niagara, Orleans, and a portion of Monroe County) in the New York State Senate. In his opening remarks at the conference on Saturday, October 19, 1996, Senator Maziarz compared watershed management to the process of putting together a jigsaw puzzle. This metaphor was well-received and often referenced during subsequent sessions, becoming a thematic backdrop for the conference. The jigsaw puzzle metaphor provided an easily understood framework for discussing obstacles to cooperative watershed management and strategies to overcome them. The appreciation expressed by conference attendees for the jigsaw puzzle metaphor is reflected in the design of this report. Senator Maziarz' remarks are reproduced in their entirety below. The remarks are positioned intentionally in this report prior to the discussion of participatory conference sessions and their outputs so that the reader may have the benefit of the metaphor which informed the conference as a whole.

Good Morning! It's a genuine pleasure for me to be with you this morning and to have the opportunity to welcome you to this conference on *Linking Local Watershed Management Efforts across the Lake Ontario Basin*. This is the fifth annual conference sponsored by the Water Resources Board and I congratulate the Board on its wisdom and initiative in bringing people together to pool resources, expertise, and experience. I also want to wish the newly expanded and renamed Finger Lakes-Lake Ontario Watershed Protection Alliance the best of success in achieving the goals that we all share. I also thank all of you for taking a Saturday to devote to planning and problem solving on behalf of the Lake Ontario basin ecosystem and all of us who call it home.

The values of watersheds are no secret to anyone here today. Among many other values, they provide:

- Natural flood and erosion control
- Water quality maintenance
- Groundwater recharge
- Biological productivity and diversity
- Fish and wildlife habitats
- Historical and archeological values
- Environmental and outdoor education
- Agricultural productivity
- Recreational and tourism opportunities

New York State's two largest industries, agriculture and tourism, depend on healthy watersheds. Combined with all these other values, there is no downside to effectively protecting and managing them. Just like all things in watershed ecosystems depend on each other to thrive, so do local communities in a watershed need each other to realize full economic, water quality, educational, and environmental benefits from the watershed. The state and federal agencies and the international programs need the local communities; we're pretty much all in this together; We have to be.

Let me share with you a metaphor, simplistic, perhaps, and not perfect, but I think illustrative of what effective watershed management efforts need to reflect.

I want you to picture yourself doing a jigsaw puzzle. When you're putting together a jigsaw puzzle, you have to do two things simultaneously and constantly, or you'll never be successful in completing the task. First, you have to pay close attention to those individual small pieces to discover how their unique edges fit together, how they compliment each other and where they rub each other the wrong way. Pretty soon, you have these little islands of matching pieces all over the table top, seemingly unconnected to each other except that they're on the same table, but that's okay, because each one of these little growing islands of complimentary pieces gives you a glimpse of the whole image you are aiming for. The payoff is in figuring out how to connect everything to produce

that final image, and so you can't leave any pieces out and you have to constantly look for linkages.

How do you do this? You're able to have confidence in this multi-faceted approach only to the degree that you are simultaneously being guided by the larger image, by the understanding of how it's all contributing to the "big picture". Discovering the "fit" of the pieces while being guided by the larger image is the only way you're ever going to complete that complex puzzle.

The management of the Lake Ontario basin sometimes seems like a really advanced jigsaw puzzle, doesn't it? One of those two-sided, 2,000-piece jigsaw puzzles. On one side, the pieces fit together to produce an understanding of the integrated complexity of the watershed ecosystems and the consequences of human activity on them. The more of these pieces that we can fit together, the clearer understanding we'll have of what needs to be done and how to do it effectively and economically.

On the other side, the pieces fit together to reveal the multiple, collaborative and multi-jurisdictional efforts to clean up, manage, and protect the Lake Ontario watershed. Watershed and political boundaries often overlap. Furthermore, different components of a watershed are usually administered by different agencies. Yet restoration of an aquatic ecosystem, for example, requires that the management of all significant ecological elements be coordinated in a comprehensive approach. It may often seem like a frustrating if not impossible challenge to fit the edges of some of these pieces together, but with cooperation, tenacity, and creativity, the fit will be discovered.

An example of a really nice fit is the Finger Lakes - Lake Ontario Watershed Protection Alliance, now 24 counties strong. With shared resources and a common vision while preserving local decision making on priorities and programs, the Alliance's successful efforts will be multiplied and will serve as a role model for other watershed communities.

Another powerful fit is represented in this room today. Each of us who care deeply about the Lake Ontario basin has different strengths that we bring to the effort to clean up, protect, and manage the watershed. We should celebrate and appreciate them all. For example, probably everyone in this room knows more than I do about the scientific and social aspects of watershed management, and your research is fundamental to any commitment of action. Some of you are experts of the history, details, and implementation of the multiple programs, initiatives, and agreements that attempt to build public participation, consensus and action on behalf of the basin's water quality. Perhaps you were even a player in the creation of these alliances and collaborations. Others of you are community members caring enough to participate in decision making processes at the local level. Others are educators connecting school children with their watershed heritage.

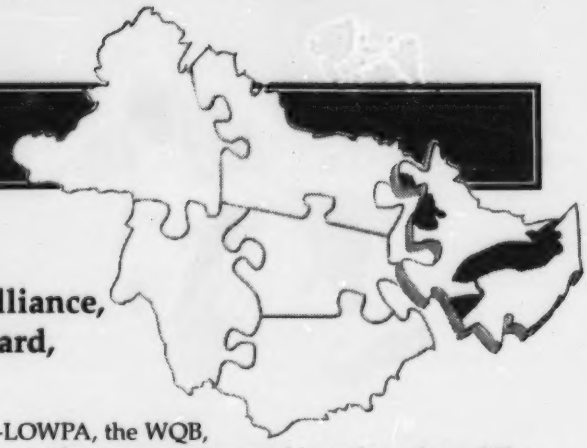
And some are like me, a public servant able to influence, as much as I can, the legislature's awareness, commitment, and support of efforts to complete the watershed jigsaw puzzle. I was thrilled to have been part of the successful effort to secure $1.2 million in this recent budget for the Finger Lakes - Lake Ontario Watershed Protection Alliance.

Watershed protection and management is a puzzle that takes commitment, cooperation, and collaboration. It makes sense from a health perspective. It makes sense from an economic perspective. And it makes sense from an environmental perspective. It also makes sense from a quality of life perspective because prevention is proactive; remediation is reactive. There is certainly cause for great pride in accomplishing the difficult task of addressing existing problems in the watershed and cleaning them up. There's no getting around engaging these challenges.

In tandem with this, however, we need to be proactive in determining the vision we want for our communities linked by our common watershed and we need to be inclusive in our actions to effectively bring this vision about. If citizens and their communities are involved meaningfully, and efforts are made to integrate everyone's contribution to watershed planning and management, the results will be powerful indeed. The heritage of a community is linked to its past, present, and future relationship with the land—its soils, its waters, its biodiversity, its geology—all of the natural and physical pieces. Is watershed management and protection worth doing? I'd prefer to let our great grandchildren answer that, but I think I know what their answer will be.

Again, let me welcome you and thank you for coming together today to brainstorm and strategize to complete the jigsaw puzzle of Lake Ontario watershed management. It's a puzzle that, together, we can complete. The final picture will be a healthy Lake Ontario basin.

Dialogue



Among the Finger Lakes— Lake Ontario Watershed Protection Alliance, The Great Lakes Water Quality Board, and Interested Publics

On Friday, October 18, a dialogue was held among FL-LOWPA, the WQB, and interested publics. The purpose of this dialogue was to share perspectives and learn how these different institutions and stakeholders can help ensure that individual efforts are integrated and complementary to other efforts. The dialogue centered on two primary questions:

- What can local watershed groups do to support regional programs?
- What can the WQB of the IJC do to strengthen community-based watershed programs?

Dialogue Process

A secondary purpose of the dialogue was to establish a comfort level between the members of FL-LOWPA and the WQB which would foster open discussion and sharing of ideas during the balance of the conference and beyond. Members of the two groups play important but different roles in watershed management. WQB members are involved in the establishment and implementation of policy or programs at the state, federal, or international levels. FL-LOWPA members implement state, federal and international policies and programs and develop grassroots programs to address locally-defined needs. The two groups are connected in watershed management as one's success (or lack thereof) affects the other's, and yet opportunities to exchange ideas and experiences are infrequent. The dialogue was organized to help "break the ice" between local and basin-level players in Lake Ontario watershed management.

The dialogue was arranged so that participants from FL-LOWPA and the WQB sat in alternating seats at a U-shaped table. Representatives from the New York State Association of Regional Councils (Regional Planning Boards) sat at the dialogue table as well. An audience of approximately fifty people sat theatre style at the open end of the U-shaped formation. The session began with brief introductions to the WQB and FL-LOWPA, and the participants at the table. The 90-minute, moderated dialogue was based on the two aforementioned questions. Notes on the discussion were documented for all to see.

Dialogue Outcomes

All participants felt much could be done to support, strengthen, and integrate watershed programs. In particular, local watershed groups are in the unique position to provide "ground truth" to regional programs and binational institutions. This feedback can be in the form of local watershed needs, priorities, and perspectives. Examples of some actions that can be taken by local watershed groups to support regional programs and binational initiatives include:

- establishing clear local priorities and communicating these priorities to regional and binational institutions (e.g., relative importance of nonpoint source control efforts, sediment remediation, habitat rehabilitation and enhancement, etc.)
- quantifying values and benefits of preservation and rehabilitation initiatives, and communicating them to regional and binational institutions as rationale for program and funding support
- coordinating priority-setting and reaching agreement on key indicators of progress among local stakeholder groups
- ensuring local goals, objectives, and indicators recognize explicitly regional program goals, objectives, and indicators (i.e., ensure that they are complementary and reinforcing)

Regional and binational groups like the WQB are in the unique position to strengthen community-based watershed programs in a number of ways. Specifically, institutions like the WQB can facilitate the ex-

change of knowledge, ideas, and practical experiences. Participants suggested that the WQB was ideally positioned to foster communication through:

- increasing use of video conferencing
- making more information available through the internet
- convening cooperative learning processes, like habitat and sediment technology transfer sessions
- providing up-to-date lists of available resources and experts
- updating and re-releasing reports of important studies like IJC's Pollution from Land Use Activities Reference Group

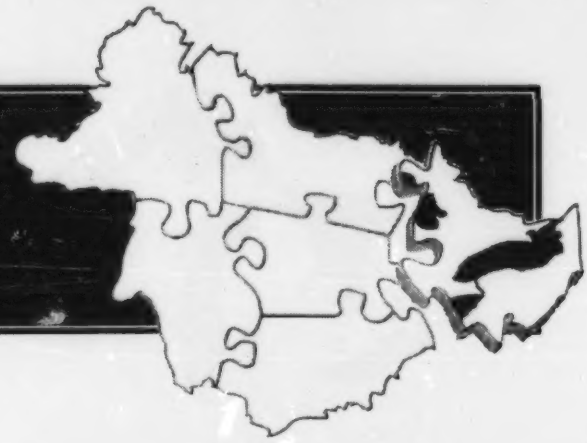
In addition, regional institutions like the IJC's WQB can play a key role in linking institutionally separate issues such as water quantity, water quality, and habitat. The IJC and its Board can help link these issues in regional workshops and conferences. IJC reports from these workshops and conferences could then provide specific examples of how to link institutionally separate issues and where it has been accomplished successfully.

Participants in the dialogue felt that the exchange of perspectives, ideas, and experiences was worthwhile. Additional such dialogues will be necessary to achieve our common goals of watershed and ecosystem-based management of shared resources.

"The programs and work of the participants in this conference in integrating ... local, regional, and basinwide remediation are essential."

—U.S. IJC Commissioner
Alice Chamberlin

Obstacles to Cooperative Watershed Management and Strategies to Overcome Them



A Process Model for Cooperative Watershed Management

Watershed management incorporates a process of decision-making regarding land and water uses, and modifications in a watershed. This process can allow communities to 1) balance diverse, and sometimes conflicting, goals and uses for local resources; 2) consider the cumulative effect of current human activities on the long-term sustainability of these resources; and 3) determine how to mitigate unwanted results from these activities.

Watershed management attempts to comprehensively address **contaminant** (e.g., point and nonpoint sources, contaminated sediment remediation), **physical** (e.g., flow augmentation, streambank stabilization, habitat modification), and **biological** (e.g., fish stocking/harvesting, wetland restoration, food web manipulation) management alternatives to achieve management goals. Goals are established based on ecosystem characteristics, public needs, and resources management input. Watershed management provides a framework for integrated decision-making and for identifying and implementing high priority actions in a process of continuous improvement.

Figure 2 represents a continuous improvement model for implementing cooperative watershed management for the Lake Ontario basin, and identifies the aspects of this model covered in the conference. The process outlined in the cooperative watershed management model brings stakeholders together to review and develop watershed visions, goals, and objectives. The watershed is then assessed relative to the agreed-upon vision, goals and objectives. If the goals and objectives consistent with the watershed vision are being met, prevention-based programs are continued to ensure sustainability of resources. If the goals and objectives are not being met, the process proceeds with the 1) evaluation of current management strategies; 2) identification of obstacles; 3) identification of strategies (actions) to overcome obstacles; 4) prioritization of strategies; and 5) implementation of priority strategies in a continuous improvement process until the watershed vision is realized (Figure 2).

Breakout Sessions to Identify Obstacles and Strategies

The breakout sessions provided an opportunity for conference participants to work in smaller groups (12 to 25 individuals) in an effort to identify and discuss key obstacles that inhibit the development and implementation of local watershed plans. The groups were asked to identify possible actions to overcome the obstacles in order to promote coordinated local and basinwide planning efforts. The breakout groups were geographically-based, representing sub-watersheds or portions of watersheds which, when "nested", cover most the New York State Lake Ontario basin (Figure 3). The six groups were:

Group 1. **Lake Ontario Central and East** (including the Black River watershed and nearshore areas east of Rochester)

Group 2. **Lake Ontario West** (including Eighteenmile Creek Area of Concern and tributaries and nearshore areas west of Rochester.

Group 3. **Oswego River Basin - Finger Lakes East** (including Skaneateles, Otisco, Owasco, and Oneida Lakes; Oswego and Seneca Rivers; and the Oswego River Area of Concern)

Group 4. **Oswego River Basin - Finger Lakes West** (including Cayuga, Seneca, Keuka and Canandaigua Lakes)

Group 5. **Lower Genesee River Basin** (including the Rochester Embayment Area of Concern)

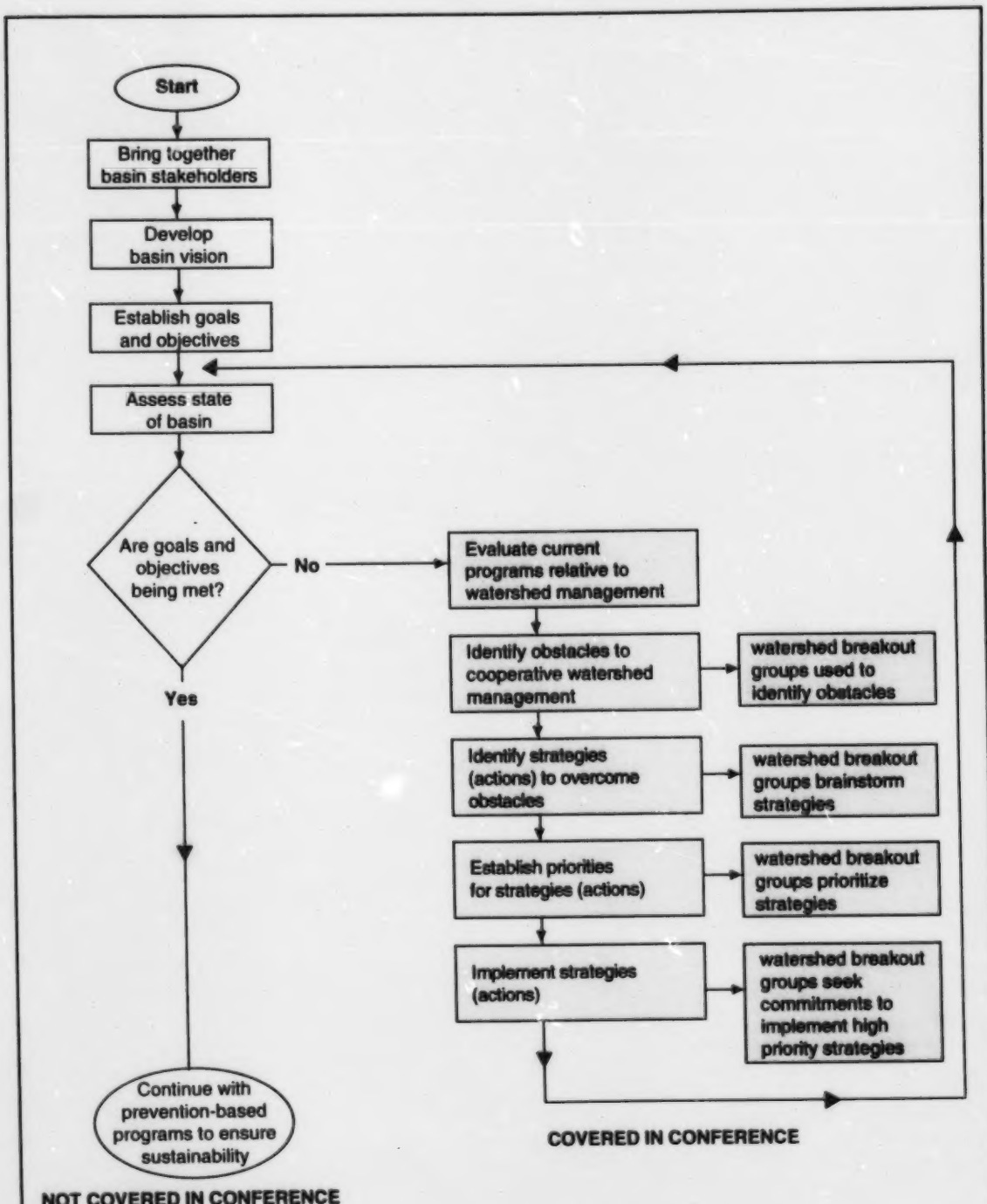

Start
Bring together basin stakeholders
Develop basin vision
Establish goals and objectives
Assess state of basin
Are goals and objectives being met?
No
Yes
Evaluate current programs relative to watershed management
Identify obstacles to cooperative watershed management
watershed breakout groups used to identify obstacles
Identify strategies (actions) to overcome obstacles
watershed breakout groups brainstorm strategies
Establish priorities for strategies (actions)
watershed breakout groups prioritize strategies
Implement strategies (actions)
watershed breakout groups seek commitments to implement high priority strategies
Continue with prevention-based programs to ensure sustainability
COVERED IN CONFERENCE
NOT COVERED IN CONFERENCE

Figure 2. A continuous improvement process for implementing cooperative watershed management for the Lake Ontario Basin, including identification of which aspects were covered in the October 18-19, 1996 conference.

Lake Ontario
Group 1: Lake Ontario East and Central
Group 2: Lake Ontario West
Group 3: Oswego Lake Basin East
Group 4: Oswego Lake Basin West
Group 5: Lower Genesee River Basin
Group 6: Upper Genesee River Basin

Figure 3. Geographical areas represented by six breakout groups.

Group 6. Upper Genesee River Basin (including Honeoye, Conesus, Canadice, Hemlock and Silver Lakes)

The breakout groups were comprised of conference participants who live and/or work in the geographical area; two to three members of the WQB; county representatives of FL-LOWPA; a resource person with program experience in the geographical area; and a professional facilitator.

The rationale for the "nested" design of the breakout groupings was threefold. First, the groups could focus on the issues at the local level and perhaps identify promising strategies for cooperation which could be pursued further after the conference. Second, it was expected that upstream and downstream linkages would be made within breakout groupings. Linkages would also be made during the afternoon panel when ideas from each group were shared with all participants. Third, the use of hydrological boundaries to define breakout groups reinforced the concept that the watershed should be the primary management unit for improving or maintaining water quality.

The facilitator guided the group through a process that resulted in a list of key obstacles hindering cooperative watershed planning and management, and a list of potential actions that could be taken to overcome the obstacles. The specific steps of the process were:

1. **Warm-up**: Participants introduced themselves; the resource person presented highlights of current activities and issues faced in the geographical area.
2. **Brainstorming**: The groups identified obstacles to developing and implementing watershed programs in their particular geographical area.
3. **Sorting and Prioritizing**: The groups discussed the list of obstacles, combining those that were similar and clarifying those needing more expla-

nation. A weighted voting process was used to identify three highest priority obstacles.

4. **Brainstorming**: The groups identified possible strategies to overcome each high priority obstacle.

5. **Clarifying and Prioritizing**: The groups identified priority strategies based on the following criteria: greatest chance for success; creative solution; builds on existing efforts; addresses multiple obstacles; improves local and regional planning efforts; level of resources needed; and achievable or "do-able".

6. **Wrap-up**: The group reviewed the process and the resulting list of priority obstacles and proposed strategies.

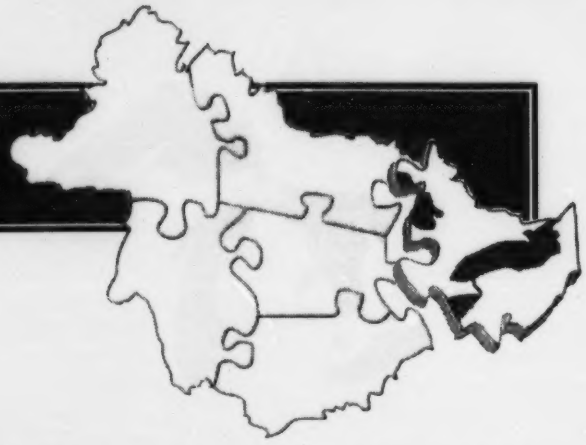
The work performed in the breakout sessions was synthesized by the facilitators who, together, examined the work of all six groups. A short list of common barriers and proposed actions, and particularly creative ideas, was developed. This summarized information was presented to the afternoon panel for feedback. A discussion of the panel session can be found in the section beginning on page 26.

On the following pages is a description of each breakout group and summary table of its work. The language used by each group is preserved in the tables so as not to change the meaning of the ideas presented. The breakout groups were considered an integral part of the conference; the work of each group is documented in this report so that readers from the geographical areas represented can consider the information, develop it further, and/or follow up where appropriate. With common concerns identified across the region, readers may also benefit from the ideas presented for other geographical areas.

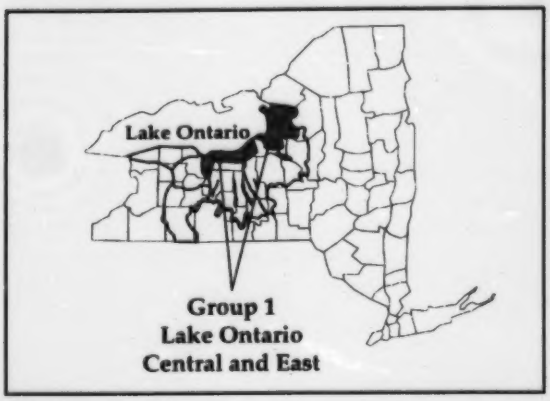
"The long-term vision of FL-LOWPA is to build a consensus on resolving the upstream-downstream problems of managing water quality to the mutual benefit of multiple parties."

—FL-LOWPA Chair James Skaley

Output of the Breakout Groups



Breakout Group 1: Lake Ontario Central and East



Overview

This breakout group discussed obstacles to cooperative watershed management and potential management strategies for the Black River watershed and Lake Ontario nearshore areas east of Rochester, New York. Represented in the group of approximately 12 were local elected officials, county, state, provincial and federal level environmental agencies, academia, and non-profit educational organizations.

Concern was expressed for a general lack of coordinated watershed management in the rural Black River watershed. Key obstacles identified by the group were: 1) lack of a central planning authority; 2) limited motivation at multiple levels of governments; and 3) lack of vision (Table 1). There was agreement in the group that a common vision for the watershed should be established to foster coordinated management efforts at the local level. Com-

TABLE 1. Strategies to overcome priority obstacles to cooperative watershed management: Lake Ontario Central and East

High Priority Obstacles	Strategies to Overcome Obstacles
Lack of central planning authority for watershed	• Empower local entities, like County Water Quality Coordinating Committees (CWQCCs), to work on a watershed basis; NYS can start by asking local entities for input on how to do this • Link CWQCCs so they will work together and communicate; empower county governments to do this, e.g., through intermunicipal agreements • Develop a planning tool for watershed management (NYSDEC is developing one)[1]
Limited motivation (local, state and federal entities)	• Develop outreach plans for various stakeholder audiences to identify problems and solutions; communicate visions and goals effectively • Gather cost/benefit data to increase motivation (central planning group) • Develop/test political support (e.g., workshops for local/elected officials)
Lack of vision	• Bring together all entities in a watershed to: 1) communicate, share ideas, and identify needs and desires 2) develop a consensus watershed vision with buy-in from all entities

[1] DEC Division of Water is developing a *Watershed Management Assessment Process*, a diagnostic tool that can be used to assess the current water quality and quantity management programs in an area, or that can be used as a first step in a watershed management planning process.

munication among local governments, organizations and stakeholders should be improved so that common goals can be developed. County Water Quality Coordinating Committees should be coordinated on a watershed basis; data collection and documentation of problems may be necessary to increase motivation to work cooperatively to address water quality issues.

Lower Priority Obstacles

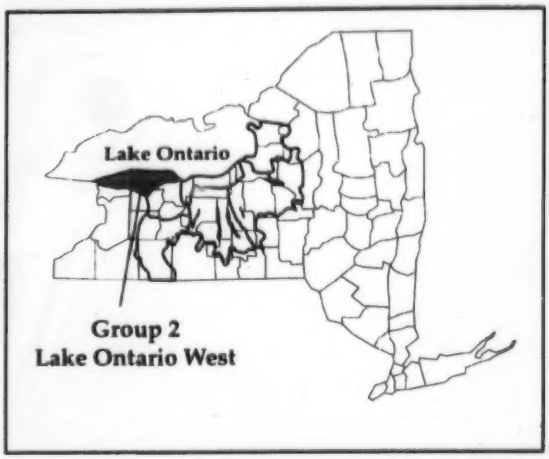
Lower priority obstacles identified, but for which strategies were not discussed due to time constraints, included:

- Political boundaries problematic for watershed planning
- Divergence on interpretation of data impedes implementing solutions
- Lack of vision at the individual subwatershed and larger basin levels
- Lack of local funding for water quality projects
- Lack of communication and awareness among local officials and planning boards
- Unwillingness to work together; lack of teamwork (e.g., agriculture and industry)
- Local agencies not seeing the importance of the "water quality connection"
- Reluctance of responsible parties to take ownership of a problem
- Upstream/downstream conflicts and lack of common understanding of the issues
- Lack of understanding about the contributions to the watershed from out-of-basin sources (e.g., air sources)
- Lack of central clearinghouse for Great Lakes and water quality information

"We should not ignore the potential for improvement basinwide by chipping away at smaller sources and problems."

—NYSDEC Region 9 Director
Gerald F. Mikol

Breakout Group 2: Lake Ontario West



Overview

This breakout group focused on the Lake Ontario nearshore area west of Rochester, New York, including the Eighteenmile Creek Area of Concern. The group of approximately 20 included many technically-trained specialists. The group also included a number of individuals who had worked with intergovernmental mechanisms to encourage interjurisdictional cooperation. Representatives in the group came from county soil and water conservation districts and health departments; New York, Ohio and Ontario environmental regulatory agencies; IJC; New York State legislature; Rochester Institute of Technology, Cornell University, State University of New York at Buffalo and the College of Environmental Science and Forestry at Syracuse University; Eighteenmile Creek Citizens Advisory Committee; and consulting firms.

Key obstacles to watershed management identified by the group were fragmentation of authority and mandates (forcing agencies to focus on single issues rather than an integrated approach) and inadequate funding and incentives (Table 2). The group suggested using multi-stakeholder planning groups and intergovernmental agreements to deal with fragmented authority. Integration of resources was emphasized to maximize program efficiency, including pooling funding and/or funding requests. Economic and social incentives were recommended to encourage support for, and participation in, watershed management activities.

TABLE 2. Strategies to overcome priority obstacles to cooperative watershed management: Lake Ontario West

High Priority Obstacles	Strategies to Overcome Obstacles
Fragmentation of authority and mandates forces agencies to focus on single issues	• Form multi-stakeholder/agency groups to cause communication to occur (e.g., CWQCC) entities • Hold Workshops • Develop formal agreements among agencies (e.g., MOUs) • Identify authorities who have a stake in issues • Use the new NYSDEC Watershed Management Assessment Process[1] • Identify a lead agency for a project
Lack of funding	• Establish trusts; Pool "green money" from contributors (e.g., Green United Way) • Form partnerships/joint ventures; share resources • Groups repackage funding requests to public officials so that requests are in line with the officials' political agenda
Lack of incentives; lack of creativity in getting help from public officials	• Offer tax incentives and breaks • Offer incentives for farmers to keep land as farms • Offer a "Good Neighbor" or environmental stewardship award

[1] DEC Division of Water is developing a *Watershed Management Assessment Process*, a diagnostic tool that can be used to assess the current water quality and quantity management programs in an area, or that can be used as a first step in a watershed management planning process.

Lower Priority Obstacles

Lower priority obstacles identified, but for which strategies were not discussed due to time constraints, included:

- Streams and waterways cross jurisdictional boundaries
- Including private property owners as stakeholders
- Tendency to look upstream as the source of problems
- Historic land use patterns
- Assumptions about regulations impede voluntary improvements by private property owners
- Having to be reactive instead of proactive
- Shifting priorities
- Availability of integrated information
- Science, technology, and management guidance are lagging for contaminated sediments
- Maintaining public participation in county Water Quality Strategies
- Need a champion or leader for Remedial Action Planning in Areas of Concern
- Bureaucratic red tape
- Perceptions and skepticism about watershed planning and issues

"Clearly, we need to integrate our environmental protection efforts so they are as coordinated and mutually-supportive as the natural systems they are intended to protect."

—USEPA Region II
Deputy Regional Administrator
William Muszynski

Breakout Group 3: Oswego River Basin East

Overview

The geographical area covered by this group was the eastern portion of the Oswego River basin, including the Oswego and Seneca Rivers, Oswego River/Harbor Area of Concern, and Skaneateles, Oneida, Onondaga, Owasco, and Otisco Lakes. Water resources in this area range from high quality to severely degraded with significant impairment of resource uses such as drinking water, recreation, fisheries, and wildlife habitat. Regulation of water levels is a related issue of concern in the geographical area. Stakeholders represented in the breakout group of approximately 20 included county health and planning departments, soil and water conservation districts, cooperative extension and environmental man-

TABLE 3. Strategies to overcome priority obstacles to cooperative watershed management: Oswego River Basin East

High Priority Obstacles	Strategies to Overcome Obstacles
Community conflict	• Document economic impacts and use to gain support • Implement better communication/education programs • Use conceptual tools to build understanding (watershed models, GIS maps) • Communicate technical information in an understandable manner • Enhance understanding of the limits of science • Increase people's ability to think critically (start in elementary schools) • Use public involvement forums to build common understanding • Listen...Listen...Listen, and then ask
Inadequate technical guidance	• Get professional support early in process • Select expertise based on a good track record • Find out how and where to ask for support • Move with caution about emphasizing only scientific results/information • Embrace various perspectives • Organize "ask the expert" forums
Limited resources at the local level	• Seek university expertise/support; find experts in the community • Leverage dollars by having sound, technically-based plans • Provide more training (especially in grant writing) for planners • Focus on how to avoid costs rather than finding more money • Target limited resources to highest priorities • Petition local/state officials for support • Enhance communication with legislators; promote successes

agement councils; regional planning councils; shoreline residents and associations; scientific consultants; non-profit environmental organizations; state and federal (Canadian) regulatory agencies; local elected officials and citizen activists.

The three high priority obstacles to cooperative watershed management identified by this group were 1) community conflict; 2) inadequate technical guidance; and 3) limited resources at the local level. Strategies discussed to deal with community conflict included documenting economic impacts related to water quality (Table 3). Other strategies to deal with community conflict incorporated public education and involvement, especially enhancing the publics' technical knowledge. Involving experts early in the problem-solving process was suggested to overcome lack of technical guidance. Several strategies were suggested to help communities pressed for resources: seeking local expertise; leveraging funds through sound, technical plans; training grant writers at the local level; using cost-avoidance measures; targeting resources to highest priorities; petitioning local and state officials for support; and promoting successes.

Lower Priority Obstacles

Lower priority obstacles identified, but for which strategies were not discussed due to time constraints, included:

- Agency overkill leading to apathy at the local level
- Political conflicts
- Lack of established priorities
- Decreasing participation in civic activities
- Conflicts between upstream and downstream stakeholders
- Incremental degradation and/or improvements
- Lack of time and people
- Competing agendas
- Poor planning

"Without the buy-in of citizens and local groups, many programs are going to look nice on paper, but are not actually going to achieve much in real life."

—USEPA Region II Deputy Regional Administrator William Muszynski

Breakout Group 4: Oswego River Basin West

Overview

The geographical focus of this breakout group included four Finger Lakes in the Oswego River basin and their connecting channels: Cayuga, Seneca, Keuka and Canandaigua. Participants in this group of about 20 represented individual Finger Lake watershed management programs, county planning departments, soil and water conservation districts, and cooperative extension associations. Also represented were Cornell University; regional planning councils; New York State Federation of Lake Associations and individual lake associations; New York State and federal regulatory agencies; and the IJC.

Priority obstacles identified included 1) lack of a shared sense of responsibility for water problems; 2) insufficient funding and resources for local groups and program implementation; and 3) lack of local capacity to deal with issues (Table 4). Strategies identified to encourage a shared sense of responsibility emphasized public dialogue and education, making

TABLE 4. Strategies to overcome priority obstacles to cooperative watershed management: Oswego River Basin West

High Priority Obstacles	Strategies to Overcome Obstacles
Lack of shared sense of responsibility for water problems (i.e., responsibility is a hard sell and takes a long time to develop)	• Education about real issues (i.e., don't need a crisis to plan or act) • Present evidence of linkages between individuals and problem (e.g. upstream/downstream • Stimulate local dialogue • Get ongoing media coverage of Finger Lakes/Lake Ontario issues and actions • Develop a tiered series of issues forums, building from lakeshore out into basin • Build basinwide perspectives and partnerships
Insufficient funding and resources for local groups and program implementation	• Fundraising 1) Use special and continuous events 2) Solicit all partners for in-kind services and cash contributions • Lobby legislators • Make more efficient use of funds received • Ensure sound, up-to-date county water quality strategies with reasonable priorities
Lack of local capacity to deal with issues	• Coordinate cycles of funding from state/federal sources • Build credibility by showing link to past efforts (e.g., 208 plans) • State and federal agencies package funding to serve county needs • Support leadership development training for local boards • Local groups must initiate contact to basin entities

linkages clear (e.g., subwatershed to basin and upstream to downstream), and positive media coverage. To overcome insufficient funding at the local level to implement programs, local plans (county water quality strategies) should be up-to-date and have reasonable objectives; legislators and all local partners should be solicited for support; and funds received should be used efficiently. To increase local capacity to deal with issues, the group proposed expanding local leadership development programs; information exchange between local and basin entities; and establishing credibility by building upon past efforts.

Lower Priority Obstacles

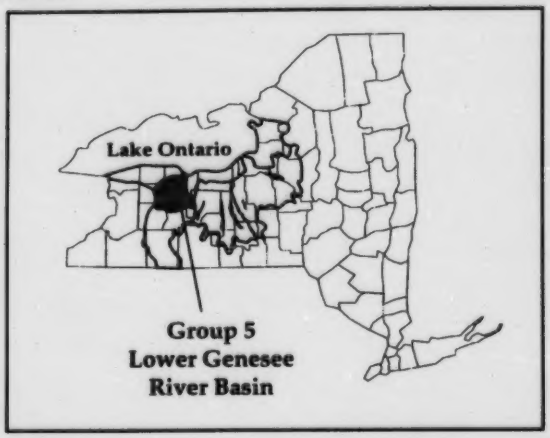
Lower priority obstacles identified but for which strategies were not discussed due to time constraints included:

- Turf protection and self-interest, as illustrated by resistance to zoning and the conflict between individual property rights v. the common good.
- Political entities resist the need for, and cost of, studies; perception that models developed elsewhere do not apply locally.

"Power for affecting change in any watershed is at the local level."

—Doug Dodge,
Great Lakes Water Quality Board and
Ontario Ministry of Natural Resources

Breakout Group 5: Lower Genesee River Basin



Overview

This breakout group focused on the Rochester Embayment Area of Concern and Genesee River north of the dam at Mt. Morris, New York. Participants in the group of approximately 20 included several representatives from the Monroe County Remedial Action Planning process for the Rochester Embayment and Genesee River. The group also included representatives from various Monroe County agencies and the Monroe County Water Quality Management Advisory Committee, Ontario Ministry of Energy and Environment, U.S. Environmental Protection Agency, and the IJC.

The group identified priority obstacles to cooperative watershed management as 1) insufficient public awareness of water quality issues; 2) insufficient coordination of priority setting across watersheds and stakeholder groups; and 3) insufficient incentives to encourage environmentally-sensitive behaviors and decision-making (Table 5). To overcome insufficient awareness, the group suggested forming a not-for-profit organization and hiring an public outreach coordinator; targeting specific audiences (e.g., inner-city, panning boards, and homeowners); training grassroots advocacy teams; creating personal incentives; developing articulate spokespeople; countering peer pressure messages (e.g., need for green lawns); providing a balanced perspective; and encouraging responsible media coverage of issues.

The group suggested improving coordination of priority setting through dialogues starting at the subwatershed level and building out to the broader basin; identifying win-win situations and making them priorities; and identifying broad issues and the necessary work to address them. To encourage support for, and individual participation in, watershed management activities, incentives that are identified locally and emphasize multiple wins should be promoted. Awards and recognition, compliance assistance, and regulatory approaches can complement volunteer, incentive-based strategies.

TABLE 5. Strategies to overcome priority obstacles to cooperative watershed management: Lower Genesee River Basin

High Priority Obstacles	Strategies to Overcome Obstacles
Insufficient awareness	• Create not-for-profit organization and hire a public outreach coordinator • Target specific audiences (children, media, inner-city, planning boards, homeowners) • Train advocates (form grassroots teams to get into communities; target inner-city; highlight impact on individual lives) • Create "incentives" and make it personal (show how one activity impacts another aspect of life) • Address peer pressure (e.g., need for green lawns) • Provide balanced perspective for all interests (be sensitive to economic importance of industry; look at levels of discharge allowed by standards) • Convince media of importance of watershed issues and provide timely information continuously; encourage responsible reporting • Help develop articulate spokespeople; develop credibility of spokespeople; develop clear and easily understood messages

TABLE 5. *(continued)*	
High Priority Obstacles	**Strategies to Overcome Obstacles**
Insufficient coordination of priority setting	• **Coordinate regular dialogue starting at most-local watershed level and building out to broader basin** • **Identify win-win situations and make them priorities** • **Convene meetings of stakeholders (consider geographic scope; issues; affiliation; look for people with "jurisdiction" or "representative" perspective, e.g., Regional Planning Agency)** • **Work with sub-watersheds to set priorities and then get together periodically with the subgroups to coordinate; ensure regular dialogue (need staff support to do follow-up and support the dialogue)** • **Identify broad issues and initiate work to solve them** • **Communicate the importance, value and benefits of critical habitats (use basin committee to build collective commitment to a set of problems; establish agreement among different parties and communicate benefits and values of collective actions)**
Insufficient incentives	• **Identify incentives through local groups (bottom-up)** • **Identify multiple incentives (win-win) wherever possible** • **Use awards and recognition to promote good actors and better choices** • **Make environmentally friendly consumer choices convenient** • **Foster compliance assistance (help people learn what to do and how to do it;**

Lower Priority Obstacles

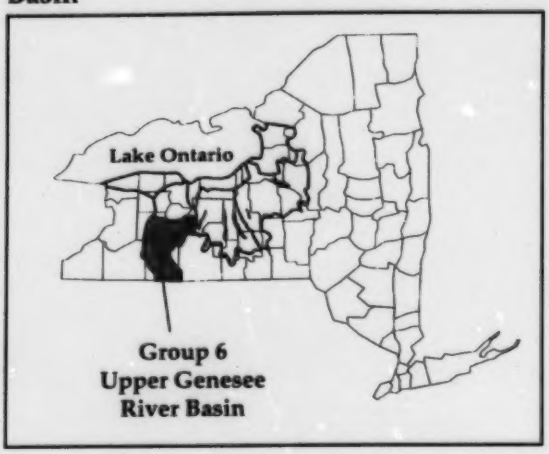
Lower priority obstacles identified but for which strategies were not discussed due to time constraints included:

- insufficient funding
- lack of a common, easily-understood set of environmental indicators

"Without a constituency for the resource—without stewards of the resource—implementing cleanup and protection programs are more difficult for all of us."

—NYSDEC Region 9 Director
Gerald F. Mikol

Breakout Group 6: Upper Genesee River Basin



Overview

Several small Finger Lakes (Conesus, Honeoye, Canadice, and Hemlock), Silver Lake, and the Upper Genesee River (area south of the dam at Mt. Morris, New York) were the focus of this breakout group. Participating in this group were representatives from the Rochester Embayment/Genesee River Remedial Action Planning process; county planning and health departments and soil and water conservation districts; environmental consultants; New York State Farm Bureau; regional planning councils; state regulatory agencies (New York and Pennsylvania); and the IJC.

Priority obstacles to cooperative watershed management identified by this group were: 1) limited funding for programs; 2) lack of common vision for eco-

TABLE 6. Strategies to overcome priority obstacles to cooperative watershed management: Upper Genesee River Basin

High Priority Obstacles	Strategies to Overcome Obstacles
Limited funding	• Better present the links between watershed protection, a healthy economy, and personal health • Build political support through additional public education (IJC Education Information Materials Directory, include in/supplement university curricula, Envirothon) • Obtain grants from Great Lakes Commission (sedimentation and erosion) and Great Lakes National Program Office (habitat improvement) • Develop other funding sources and partnerships with other agencies and corporations
Lack of common vision of ecosystem objectives throughout the watershed on the part of the public, agencies, and governments	• Involve more people through additional outreach and involvement of groups and opinion leaders in actions (watershed management persons need to attend community meetings, use videos on public access channels, and appear regularly on radio shows) • Provide additional education regarding ecosystem management and the watershed concept in schools and for municipal officials • Involve students in the political process • Highlight commonalities of stakeholders while recognizing differences • Develop key indicators of progress and provide feedback (Lake Ontario Lakewide Management Plan)
Political divisions within watersheds	• Provide economic incentives, positive media, and recognition—instead of regulation—to encourage and reward upstream assistance with downstream problems (e.g., Chesapeake Bay watershed) • Use existing levels of government and provide leadership (well recognized individual) to promote and tie the basin together (FL-LOWPA; Regional Planning Councils; Finger Lakes State Parks Director for recreation and historic preservation links; have politicians represent watersheds)

system objectives; and 3) political divisions within watersheds (Table 6). To overcome limited funding, the group suggested tapping Great Lakes funding programs and the development of partnerships between agencies and corporations. The group also encouraged public education and better articulation of the link between watershed protection, personal health, and a healthy economy to build more political support for programs. The group asserted that a common vision could be fostered through public involvement and outreach activities, and through a process that highlights common interests of stakeholders while respecting differences. Economic incentives (over regulatory approaches) and using well-recognized political leaders to promote watershed management solutions are two strategies proposed for overcoming political divisions within watersheds.

Lower Priority Obstacles

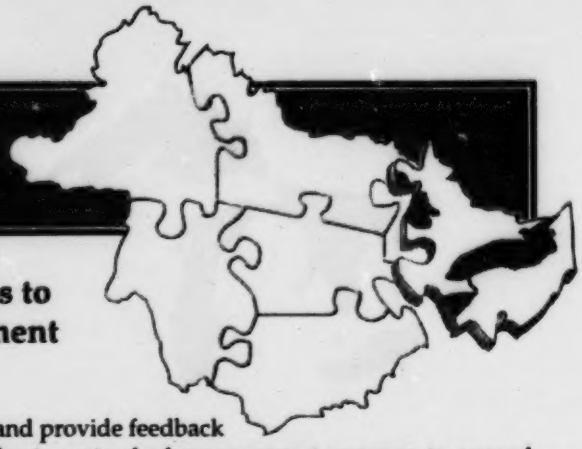
Lower priority obstacles identified, but for which strategies were not discussed due to time constraints, included:

- Lack of understanding of our impacts on others; tendency to blame someone else in the watershed
- Lack of quantification of the problem to generate sufficient political interest and funding
- Land use control is local, but a major tool in dealing with the watershed problem of nonpoint source pollution
- Pennsylvania headwaters are not included in watershed maps or discussion of the watershed
- Not enough data and monitoring
- Lack of institutional memory; information not passed from one local government administration to another
- Lack of time; local concerns take precedence over cooperative efforts
- Not enough information on the positive and negative costs associated with watershed program compliance
- Difficult to convene meetings in a physically large watershed

"The heritage of a community is linked to its past, present, and future relationship with the land..."

—The Honorable
George D. Maziarz

Interactive Panel Discussion



Strategies to Overcome Obstacles to Cooperative Watershed Management

Overview

The purpose of the interactive panel was to synthesize and provide feedback on ideas resulting from the breakout sessions. Obstacles to watershed management common to several breakout groups were listed by a group of facilitators and resource people immediately following the breakout group sessions. Commonly proposed or creative strategies to overcome these obstacles were also noted. Liaisons to the breakout groups presented the obstacles and/or actions in the form of a question or finding to a panel for further discussion. The panel represented a broad range of perspectives and expertise, including representatives from local, state, and federal agencies (U.S. and Canadian); agriculture; a non-profit environmental organization; the Great Lakes research community; and the New York State Legislature. Panelists included:

- Robert N. Brower, FL-LOWPA and Director, Cayuga County Planning Department
- Thomas Behlen, Water Quality Board and Ohio Environmental Protection Agency
- Bruce Carpenter, Executive Director, New York Rivers United
- Renee Forgensi Davison, Director, NYSDEC Region 8
- Joseph DePinto, Director, Great Lakes Program, State University at Buffalo
- Simon Llewellyn, Water Quality Board and Environment Canada
- Sue Senecah, Special Assistant to Senator George Maziarz and Assistant Professor, SUNY College of Environmental Sciences and Forestry at Syracuse
- Kyle Stewart, Assistant Director of Government Relations, New York Farm Bureau

A professional moderator guided the discussion and, when appropriate, asked the question, "Who is willing to be responsible for this action?" Commitments could range from volunteering to initiating a dialogue or meeting on a subject to offering services to facilitate or complete an action. Audience participation was encouraged throughout the session, and notes from the discussion were recorded on a large screen for the audience to view. Following is a discussion of common obstacles, and strategies to overcome them.

Discussion of Common Obstacles and Suggested Actions

Obstacle: Lack of awareness, knowledge, responsibility, and, ultimately, shared vision

Citizens and communities are not "naturally" committed to proactive, comprehensive watershed planning. It is likely that such a commitment must be developed, for often more immediate and backyard concerns occupy our attention. There is also a tendency to look to others as the source of problems in watersheds — those upstream look down, those with septic systems look to barnyards, those in local offices look to state or federal agencies, and vice versa. Commitment to watershed planning implies a sense of responsibility to do one's part to ensure the future health of a watershed. This commitment can be built only after citizens and communities become aware of the importance of watersheds and are knowledgeable about watershed resources and dynamics. Awareness and knowledge precede commitment. The panel offered several suggestions for increasing education and public involvement processes to help develop awareness, knowledge, and, ultimately, commitment to action. These ideas also offer suggestions for shaping a community problem-solving and decision-making process.

Action: Increase public education and involvement efforts

- Target specific audiences and be sensitive to their information needs and concerns. For example,

local officials may fear loss of authority in dealing with watershed issues, and so may be reluctant to participate. Local planning boards are a high priority target audience, as they have control over land use decisions in New York State. Local planning boards need training to develop their capacity to play a significant role in watershed planning.

- Identify all stakeholder groups and be sure they have equal access to information. Information is power; all should have sound footing in the process.
- Encourage democratic participation by being receptive to people who perceive they have lower status or less information, and are therefore disadvantaged. Forums should be structured to accommodate working families and family commitments, e.g., by offering child care.
- Expand interdisciplinary programs at the post-secondary level to educate future leaders with broad perspectives in watershed planning and management.
- Educate legislators in Albany and Washington, D.C.; bring technical information in a form legislators can appreciate and use to justify their support.
- Invest in education; granting agencies should offer grants larger than $5,000 for education.
- Recognize the difference between public education, which is the dissemination of information, and public involvement, which involves dialogue and input into decisions. Both are needed. When conducting public involvement, remember to LISTEN.
- Assign a competent professional to the task of coordinating education/public involvement; it is that important! Cornell Cooperative Extension is a resource for education and training.

Obstacle: Insufficient funding and resources

Implementing watershed management plans is usually expensive. In New York State, implementation tends to occur at the local level of government where funds are often most limited. It has become increasingly difficult to fund programs through state and federal sources. Given the competitive fiscal environment, communities should focus on strategic planning, cost-avoidance, creative solutions, and collaborative efforts to 1) increase chances for successful funding in a competitive environment and 2) move forward when funds are not available.

Action: Use strategic planning with good coordination and integration of stakeholders prior to seeking funds

- Do the hard work first by developing a strategic plan, because good strategic plans get funded. Strategic plans include:
  1. clear priorities
  2. a timeline for implementation and sequence of activities
  3. cost-avoidance measures and creative alternatives that emphasize efficient use of funds (e.g., Can funds be generated rather than relying on grants?)
- Pool requests under one umbrella; use collaborative requests for funding.
- Develop capacity at the local level to conduct strategic planning through training programs.

Action: Dedicate individuals in agencies on a watershed basis to facilitate community-based strategic planning. New York State regional planning boards and county planning agencies can fill this role.

Action: To increase efficiency, expand existing volunteer-based efforts, such as the Izsak Walton League's stream monitoring program.

- Expand volunteer programs to basin level.
- Coordinate local efforts. DEC Regions and six ecosystem coordinators in Division of Water can assist by steering local programs to each other. County Water Quality Coordinating Committees and groups which conduct monitoring should be involved in coordinated, basin-level efforts.
- Locate and involve local experts in communities.

Obstacle: Insufficient capacity at local level

Many obstacles identified by the breakout groups impair local capacity to undertake and sustain cooperative watershed management initiatives. These include lack of technical and economic resources, shared responsibility and motivation, common vision, established priorities, and planning authority. Other obstacles impairing capacity-building efforts are: community conflict and lack of teamwork, difficulty coordinating meetings in a geographically-large

watershed, lack of data on which to base decisions, "institutional memory" not being passed from one town administration to the next, a tendency to be reactive versus proactive, and jurisdictional boundaries and institutional fragmentation. Certainly these problems can be found in all levels of private and public sectors, but the actions listed here are discussed in the context of local governments and communities pursuing watershed management programs.

Action: Create and support local leadership development

- Utilize colleges and universities
- Involve kindred organizations which share your goals to assist in watershed initiatives. Be open to unusual and unexpected opportunities. Examples include:
  1. Virginia Master Gardeners teaches water quality concepts to develop "water-wise gardeners"
  2. Kelly's Island in Ohio was turned into an ecotourism center by a bed and breakfast organization
  3. Historical societies can incorporate watershed concepts into tours and programs
- Communicate effectively with business interests to generate support. Articulate the link between healthy economy and high water quality. Involve Chambers of Commerce. FL-LOWPA and Seneca Lake Pure Waters Association can work together to secure more participation from the business sector for the 1997 conference (goal of at least 5% participants representing business interests).

Who will promote and coordinate leadership programs?

- Use existing models so as not to reinvent the wheel: Leadership Cayuga and Leadership Rochester. Bob Brower, Cayuga County Planning Department and DEC Region 8 are contacts, respectively.
- Coordinate a statewide program through Cornell Cooperative Extension. DEC and U.S. EPA should fund the program. Individual, small grants are not productive.

Obstacle: Insufficient coordination of authority and priority-setting across watersheds

The statement "Water does not abide by political boundaries" sounds cliché. The implication of this nevertheless factual statement is the clear need for coordinated management of water resources. To manage watersheds well requires coordination among political jurisdictions and agencies with fragmented authority. Communication is essential to broaden perspectives, develop common priorities and clarify roles and commitments.

Action: Support bottom-up watershed initiatives to develop common priorities and buy-in

- Create or use existing groups to facilitate integration of jurisdictions and authorities (e.g., county water quality coordinating committees).
- Get all organizations and agencies to a table to foster common understanding and partnerships. Each needs to understand its role in the group and to take the group's decisions back to the home organization. The group's priorities can then become understood by all. Examples of efforts include:
  1. Irondequoit Bay Coordinating Committee
  2. Canandaigua Lake Watershed Policy Committee
  3. Lower Genesee River public dialogue
- Be flexible. Agencies and authorities may have to give something up — or be willing to step aside from its jurisdictional framework and responsibilities to include others (e.g., the Lake Superior Program is staffed by an employee working jointly for federal and provincial agencies; an advantage to both jurisdictions).
- Foster communication through formal agreements, such as Memoranda of Understanding (MoUs) or "performance partnership agreements." MoUs should establish timelines to target and show progress.
- Use a Council of Governments if too many parties are involved, making an MoU unwieldy.
- Develop an assessment tool for watershed management groups to evaluate their programs and identify overlaps and gaps. DEC Division of Water is developing a *Watershed Management Assessment Process*, a diagnostic tool that can be

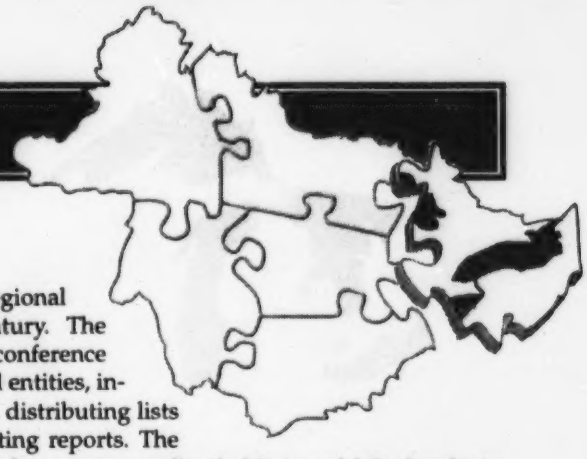
used to assess the current water quality and quantity management programs in an area.

- Coordinate dialogues on a tiered-basis, beginning at the local level and broadening to the watershed or basin level.
- Provide pressure, incentives, and guidance to local jurisdictions to work out solutions. The New York State Legislature can fund and/or assist with enabling legislation when a sound plan with local consensus is presented. Examples include the Long Island Pine Barrens experience and New York City-Catskill Watershed Agreement. NYSDEC can provide 604(b) funds to regional planning boards for watershed programming at the local level.

"Our potential for both regional and basin-wide improvement is better if we work together."

—NYSDEC Region 9 Director
Gerald F. Mikol

Recommendations



Specific action steps outlined in the October 18-19, 1996 regional conference report can guide FL-LOWPA into the next century. The WQB has a strengthened commitment resulting from the conference to help foster communication between basinwide and local entities, including video conferences, cooperative learning processes, distributing lists of resources and experts, and updating and widely distributing reports. The WQB will also help link institutionally separate issues, such as water quality, habitat, and lake levels, to provide a conceptual umbrella to assist local ecosystem-based watershed planning.

The Conference Steering Committee additionally recommends the following to FL-LOWPA and the WQB to improve their roles in the facilitation of cooperative watershed management:

1. It is recommended that FL-LOWPA continue to improve its conference cycle by using the model from the 1996 Lake Ontario basin forum and applying it to the subwatershed level, including Finger Lakes and river basins. The model guides a community-based process to stimulate watershed visions and goals and evaluate strategies for meeting goals. It is recommended that FL-LOWPA members take ownership of the output from local conferences by 1) using the output from these forums to continuously improve current watershed management strategies for the watersheds they represent and 2) ensuring the implementation of specific conference recommendations where appropriate. FL-LOWPA's five-year conference cycle should be coordinated with the IJC so that, every fifth year, the forum is co-sponsored by FL-LOWPA and the IJC's WQB to bring together local and regional perspectives for a basinwide conference on Lake Ontario (see recommendation 4 below).

2. It is further recommended that FL-LOWPA advocate the use of facilitated processes for community-based, cooperative watershed management. Recognizing that resources are not consistently available at the local level for facilitated processes, FL-LOWPA should provide training to its membership in the cooperative watershed management model demonstrated at the 1996 conference and in facilitation methods.

3. It is recommended that FL-LOWPA members take responsibility for bringing basinwide information and perspectives from regional entities, such as the IJC and the Lake Ontario Lakewide Management Plan (LaMP), to discussion at the local level. As a starting point, FL-LOWPA representatives can offer the information in the October 18-19, 1996 conference report to cooperators involved in grassroots watershed management and planning efforts.

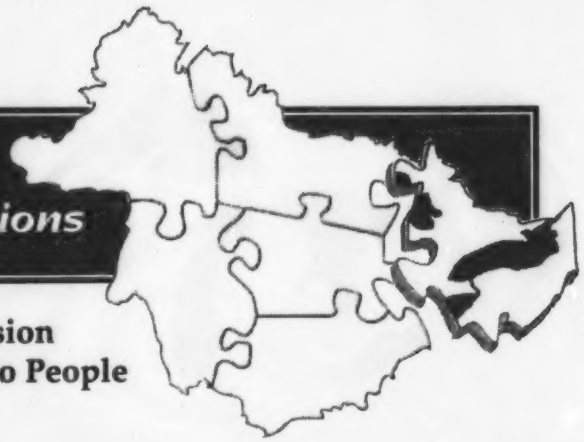
4. It is recommended that the IJC use its review and evaluation role to convene LaMP, Remedial Action Plan (RAP), fishery management, and other watershed stakeholders around Lake Ontario to review progress collectively and promote integration/cooperation. Perhaps the IJC could convene one such meeting/forum on each of the five Great Lakes during a five-year, iterative cycle. Advantages of a five-year, iterative review cycle would be: one Great Lake is a realistic scale to review progress and the need for integration; such a meeting/forum would create efficiencies for the IJC and state/provincial and federal governments; it would foster lakewide alliances (i.e., it could demonstrate the importance and need for local watershed efforts to achieve lakewide goals and objectives, and that some impairments in Areas of Concern like fish consumption advisories cannot be solved by RAPs alone and will require whole lake action through LaMPs); and such a meeting/forum would serve as a good mechanism to celebrate successes and measure incremental progress (using a common set of indicators) consistent with practical application of an ecosystem approach and watershed management. FL-LOWPA should be a co-sponsor of the IJC meeting/forum for Lake Ontario.

5. It is recommended that the IJC update or re-release the work of its Pollution from Land Use Activities Reference Group (PLUARG). Many people felt the PLUARG work is still relevant and

timely, considering the current emphasis on watershed planning and management. The IJC could recommend that the federal, state, provincial, and local governments use the PLUARG report as a benchmark to measure progress in restoring waters within Lake Ontario and its basin. Perhaps the IJC could act as a facilitator/resource available to agencies in interpreting and applying the findings and recommendations of PLUARG.

"Regional alliances ... have great potential for having input on and assisting implementation of local and regional programs that will not only solve watershed problems in your backyard, but will ultimately solve the basin's problems, improving Lake Ontario."

—NYSDEC Region 9 Director
Gerald F. Mikol



Appendix A
Summaries of Presentations

International Joint Commission Priorities and Their Importance to People from Upstate New York

Commissioner Alice Chamberlin

The International Joint Commission (IJC) is very pleased to have joined the Finger Lakes-Lake Ontario Watershed Protection Alliance in co-sponsoring the October 18-19, 1996 conference entitled "Linking local watershed management efforts across the Lake Ontario basin." The IJC has a long history of undertaking initiatives to increase public participation and professional networking along the Canada-United States border. This conference was the first public meeting of the IJC's Great Lakes Water Quality Board (WQB) under the Commission's revised public information policy. The primary intent of these public meetings is to provide an opportunity for the public to bring their concerns and questions to the attention of the WQB and IJC. A secondary benefit is furthering productive working relationships among regional institutions like Region II of U.S. Environmental Protection Agency, New York State Department of Environmental Conservation, and the Finger Lakes-Lake Ontario Watershed Protection Alliance, and local organizations like communities and lake associations. Such productive working relationships are essential to the restoration and protection of Lakes Erie and Ontario, and the St. Lawrence River.

The challenge of environmental protection and remediation is falling more and more frequently on the local communities and local planning institutions. The IJC views the outstanding work of Monroe County and its stakeholders in the development and implementation of the Rochester Embayment RAP as one of the best examples of community-based planning and management in the Great Lakes basin. All stakeholders in the Rochester Embayment Remedial Action Plan (RAP) should be very proud of what has been accomplished.

One of the roles of the IJC under the Great Lakes Water Quality Agreement (GLWQA) is to assist the Parties in achieving the goals of the GLWQA. It is the hope of the IJC that the achievement of those goals will strengthen the work of regional and local agencies. Virtual elimination of persistent toxic substances is one of the hallmark goals of the GLWQA.

In the two decades of progress under the GLWQA, both countries and the states and provinces have faced the "worst first" in end-of-the-pipe and hazardous waste site cleanup. Now, as resources for remediation are tight at every level of government, we are dealing with some pollutants that can be minute in quantity, invisible in their delivery, bioaccumulative, intergenerational in their effects, and potentially very expensive to cleanup. So in our efforts to help meet the goal of virtual elimination, it benefits both the IJC and the communities we serve to continue to review the complex evidence on persistent toxic substances. Many of the IJC's current priorities are focused on improving our understanding of the impacts of persistent toxic substances on humans and ecosystems.

A number of IJC priorities are particularly relevant:

Impacts of Persistent Toxic Substances on Human and Ecosystem Health: The IJC's Science Advisory Board and other experts are assembling the new evidence pertaining to the disruption of the endocrine system of wildlife and humans by persistent toxic substances, and the effects of these substances on neurobehavior of humans and other animals. Such evidence provides the rationale necessary for additional remedial and preventive actions and for our continued binational efforts to achieve virtual elimination of persistent toxic substances. At a practical level, anyone who consumes fish from Lake Ontario or contaminated tributaries to Lake Ontario under-

stands the importance of a solid scientific understanding of the effects of these contaminants, not only for our generation, but future generations.

Sources and Pathways of Persistent Toxic Substances both Internal and External to the Basin: The IJC's WQB is working with the International Air Quality Advisory Board to summarize the state of knowledge pertaining to the sources and pathways of persistent toxic substances. For example, it has been found that over 90% of the PCBs entering Lake Superior are coming from the atmosphere and some of this is coming in from outside the basin. We need to know the relative contributions of such contaminants from all sources and pathways so that management efforts can be prioritized, and so that programs administered in the local watersheds and reductions in contaminants achieved locally are not compromised by sources outside a local watershed. For some contaminants, it may take multi-national efforts to achieve our goals. In this case everyone lives downstream/downwind and everyone will benefit from these efforts.

Remediation and Management of Contaminated Sediments: The IJC's WQB is evaluating current programs and activities, identifying barriers and obstacles to sediment remediation, and making recommendations to overcome those obstacles and barriers. All 42 Areas of Concern in the Great Lakes Basin have contaminated sediments. But not all areas have the same severity of sediment problems or geographical extent of problems. We need to know where we need sediment remediation and where we can use the no action alternative (i.e., source control and natural recovery). We need to know how to undertake sediment remediation, how to ensure it is cost-effective, how to ensure a step-wise approach to sediment remediation, and how to gain public acceptance of the preferred remedial option. None of these are easy questions and we are all learning. This issue is not only important to stakeholders in New York Areas of Concern, but stakeholders working to restore Onondaga Lake that is contaminated with mercury.

Pesticides: Another locally-important IJC priority is pesticides. The IJC is providing forums and distributing information on pesticide issues that have been identified as basinwide obstacles to progress under the GLWQA. The IJC co-sponsored a pesticide workshop earlier this year in Madison, Wisconsin with the Conservation, Technology, and Information Center. The workshop reviewed the current information related to urban, suburban, and agricultural pesticide usage throughout the basin, and developed a variety of recommendations for achieving additional reductions in pesticide use. This pesticide issue is directly relevant to Upstate New York because of the extensive agricultural emphasis on fruit production. It is also relevant to the IJC's work on pollution prevention as an important tool for achieving virtual elimination. The summary and conclusions of this workshop will be sent to representatives of all Areas of Concern and will be available on the internet.

Science, Research and the IJC: Other IJC priorities include work on ecological modelling for Lake Erie and improving the effectiveness of science and research in the Great Lakes. The IJC is very concerned about the magnitude of research cuts in the Great Lakes. A survey of research institutions performed by the Council of Great Lakes Research Managers revealed that the average budget cuts of 31 research establishments will be about 50% between 1994 and 1997. The number of researchers employed by these institutions is predicted to decline at least 47% in the same time period. All of us should be concerned because research and science is the foundation of our management programs such as watershed plans, subwatershed plans, RAPs, and lakewide management plans (LaMPs).

RAPs and LaMPs: The IJC also has responsibility for evaluating progress of RAPs and LaMPs. While everyone acknowledges that not every RAP has had success in its planning and remediation efforts, the IJC believes that Remedial Action Planning Programs and Lakewide Management Planning Programs are on the cutting edge of implementing ecosystem-based management and watershed management. Not only are local watershed management practitioners learning how to restore and sustain ecosystems, but we all are learning how to ensure such local efforts are complementary and reinforcing with regional and basinwide efforts.

The programs and work of the participants in this conference in integrating the work of local, regional, and basinwide remediation are essential. The IJC congratulates all Upstate New York stakeholders for their efforts and accomplishments. Thank you for being a partner in restoring and sustaining the integrity of your local ecosystem and the integrity of the Great Lakes Basin Ecosystem.

The Finger Lakes–Ontario Watershed Protection Alliance: Vision for Watershed Management in New York's Lake Ontario Basin

Chairman James Skaley

The Finger Lakes - Lake Ontario Watershed Protection Alliance (FL-LOWPA) is a coalition of 24 counties joined together cooperatively to protect local and regional watersheds. FL-LOWPA is funded by the New York State Legislature. We work under contract with New York State Department of Environmental Conservation with funding being shared equally by each of the member counties. The funds and a 24-county program are administered by the Water Resources Board with the assistance of the Finger Lakes Association, Inc., with offices in Penn Yan, New York. Program needs are defined locally.

The 24-county Alliance is newly expanded in 1996 (from 18 counties formerly) and includes various hydrologic units within the Lake Ontario basin, including the Black, Oswego and Genesee River systems, the Lake Ontario shoreline, all eleven Finger Lakes and several smaller lakes. FL-LOWPA evolved from a common need among these counties to protect and improve water quality. The basic premise of the Alliance is that ***local economy depends on local resources; protecting and maintaining water resources helps to sustain the local economy.*** The linkage between economy and water resources is evident in the region. Consider the importance of potable drinking water supplies, water-based recreation, the tourism industry, and general quality of life supported by the area's lakes and waterways.

How did the Finger Lakes-Lake Ontario Watershed Protection Alliance come to be? The Alliance evolved from a single common need in the mid-1980's: control of Eurasian watermilfoil, which was affecting recreational resources in several of the Finger Lakes. The program was funded by the New York State Legislature as the Finger Lakes Aquatic Vegetation Control Program. This was a grassroots initiative with broad support locally. There were also economic incentives for the program. For example, lakefront properties provide proportionally more tax income to municipalities. As conditions particularly in a small water body deteriorate, recreational uses of the water body are more limited, and there is the potential for assessed valuations to go down.

Interest in maintaining the recreational uses of these lakes is high as demonstrated by the tens of thousands of dollars spent by local governments and by private lake associations on mechanical harvesting of aquatic weeds. Recently, there has been interest in spending moneys on chemical control which, besides being very expensive, may lead to the release of excessive nutrients resulting in algal blooms.

Attracting tourist dollars is a major effort in the region. Many tourists come interested in water-related activities such as fishing for bass and lake trout; boating; or the use of the barge canal and its historic points of interest. Many visitors take back home a lasting impression either of clean lakes, a pleasant swimming beach, a good catch of fish, or one not so pleasant, in which case a second visit to the area is less likely.

For some communities, the lakes and streams provide an even more important resource: drinking water. Deprived of a clean and healthy source of water, these communities would be burdened with the added costs of filtration and treatment to provide citizens and industries the water needed at a reasonable cost.

While economic incentives such as I have mentioned are important to mobilize concern, the support may be uneven in a watershed due to perceived differences in benefits. This perception may be summed up as, "Your gain may be my loss."

There are political incentives for the program as well. As indicated on the map showing the basin and the member counties, the area's hydrologic units cross numerous political boundaries. Demographics vary across the region, with population centers tending to be concentrated on the downstream part of the principal watersheds. Upstream population density tends to be lower. Population means votes and influences distribution of the State's fiscal resources. Downstream populations feel the impacts of deteriorating watersheds, flooding, soil erosion and sedimentation, high concentrations of nutrients and the potential for waterborne parasites such as

cryptosporidium and girardia which may pose health risks. Upstream people have their own problems, like loss of valuable property due to erosion and lack of fiscal resources to maintain watersheds.

How does FL-LOWPA function? FL-LOWPA embraces a grassroots approach, decisions by consensus, and sharing of information and resources. What exactly do we do? Macrophyte control is still a major concern. Presently we are studying the possibility of a biological control for milfoil which we believe has substantial promise. The benefits of biological control are that it is natural, will reestablish a balanced lake ecosystem, and is far less expensive than mechanical or chemical controls. Other program activities include erosion control, pollution monitoring, public forums and educational programs, research on lakes and streams, and whole watershed management approaches.

What are our objectives? Our first objective is to build alliances. This includes working cooperatively with other agencies to better utilize resources and more effectively implement programs. Our second objective is to institutionalize the Alliance through local and state support. Maintaining and managing the watersheds will be an ongoing effort and one which we cannot ignore without incurring future costs. Therefore, another objective is to seek continued funding for FL-LOWPA.

What is our action plan? Our action plan is to coordinate public forums such as this one; to work at the local and regional levels to identify stakeholders and to work with these stakeholders to overcome obstacles to whole watershed management; and to provide resources to fund local solutions and address watershed concerns.

The long-term vision of the Water Resoures Board as the governing board of FL-LOWPA, and its member counties, is to build a consensus on resolving the upstream-downstream problems of managing water quality to the mutual benefit of multiple parties. To do this, the Board will continue to do what it has demonstrated to be successful over the past decade:

- build grassroots support for local solutions to water quality problems
- support whole watershed management perspectives and approaches to link upstream and downstream concerns
- support management strategies and research designed to benefit all member counties, the Finger Lakes, and the Lake Ontario basin.

"The basic premise of the Finger Lakes-Lake Ontario Watershed Protection Alliance is the local economy depends on local resources; protecting and maintaining water quality helps to sustain the local economy."

—FL-LOWPA Chair James Skaley

Introduction to the NYS Lakewide Management Plan (LaMP) for Lake Ontario and the Basin Team Approach to Citizen Involvement

Gerald F. Mikol, Director
Director, NYS Department of Environmental Conservation, Region 9

Thanks for the opportunity to share my thoughts and our Lake Ontario Lakewide Management Plan (LaMP) process with you. DEC Commissioner Zagata and, in fact, Governor Pataki, are very supportive of geographic initiatives, especially watershed management planning and implementation. This support is evidenced by the fact that there are now six Special Assistants to the Commissioner coordinating watershed or geographical initiatives around the state. Also, the Governor's Clean Water/Clean Air Bond Act has eight separate geographical components, including the Great Lakes and the Finger Lakes. All eight areas are watershed-oriented. This is good news for those of us who have worked on geographical initiatives for years. Also evidence of this support, DEC now has several project teams that are looking at cross-program and cross-media issues.

I want to focus my remarks this morning on three general areas. First, I will give a brief overview of the entire Great Lakes basin. I think it is important to step back and have an appreciation for the magnificence and importance of this shared resource. Second, I will give a very brief overview of the Lake Ontario LaMP process and why it's important to New York. I will not give you all the details, but rather key concepts about the project, and I encourage you to talk to me and other folks here today from the agencies dealing with the lakewide management process. I will also discuss New York's basin team approach to the LaMP public involvement process and ultimately its implementation.

Senator Maziarz was accurate when he referred to the watershed as a jigsaw puzzle. The Great Lakes are a giant jigsaw puzzle. Geographical information is important for understanding of the size and diversity of the basin's resources. There are five very different Great Lakes flowing from Canada and seven Upper Great Lakes States through New York State and on to the Atlantic Ocean via the St. Lawrence River. This is a huge basin with very different lakes, rivers, peoples and problems.

As a former scientist, I like statistics. I use statistics here to impress upon you the magnitude of this resource. The Great Lakes Basin includes:

- 5 lakes and 4 connecting channels;
- 8 states and 2 provinces;
- 300,000 square miles;
- 5,000 cubic miles of water;
- 40 million people living in the basin in Canada and the U.S.;

As a resource:

- About 30 million depend on the Great Lakes for domestic water supply;
- About 2.5 million metric tons of raw materials and commodities are moved yearly on the Great Lakes by cargo ships;
- Recreational fishery and associated economic benefits are estimated at about $5 billion annually;

The Lakes equal about 20 percent of the earth's available freshwater, but only one percent of the water in the lakes is renewable annually. What this means is very little water leaves the Great Lakes on an annual basis — a very slow turnover rate. This is important because it has driven policies of the U.S. and Canada for many years on persistent toxic substances.

New York's Great Lakes Basin And Sub-Basins

There are six major Great Lakes sub-basins, with Lake Champlain included. New York's Great Lakes basin equals about 40 percent of the State's surface area and about 19,000 square miles. Major metropolitan areas in the basin include Buffalo, Rochester and Syracuse. In contrast, rural agricultural areas also make up the basin, including the Genesee River basin and the Finger Lakes drainage area. The sport fishing in-

dustry estimated 1991 expenditures to be $570 million.

My intention in providing this kind of background information is to convey that the Great Lakes are a significant natural resource and economic influence for both the U.S. and Canada. They are a significant recreational resource. Due to the size of the basin and its slow rate of flushing, it is important to reduce persistent contaminants to the system and manage the water resource.

Chronology Of Lake Ontario Programs

I want to indicate the long-term involvement and commitment of New York State and the other agencies and partners in managing this resource by listing major milestones over the years. These are the agreements most important in terms of water quality:

1972: Great Lakes Water Quality Agreement - Amended in 1987
1987: Four-Party Declaration of Intent (USEPA, Environment Canada, OMEE, NYSDEC)
1989: Lake Ontario Toxics Management Plan
1990: USEPA Critical Programs Act
1995: Four-Party Work Plan
1996: Draft Stage I LaMP
1997: Stage I LaMP (anticipated)

LaMP Objectives

What is a LaMP, and what will it attempt to do?

The "Four Parties" are leading the LaMP development and implementation effort. The Four Parties include the New York State Department of Environmental Conservation, United States Environmental Protection Agency, Environment Canada and the Ontario Ministry of Environment and Energy. The general concepts that drive the LaMP process include:

- **Evaluate ecosystem health** by comparing current data and information against the 14 IJC Indicators of Use Impairment. A few examples of the 14 indicators include fish consumption advisories; degraded fish and wildlife populations; drinking water problems and beach closings. The indicators are a framework for evaluating the Lake Ontario system as an ecosystem.

- **Focus on substances of lakewide concern**. There has been a lot of discussion on what lakewide means, but generally it is safe to say it refers to a substance causing a problem lakewide. An example is related to fish consumption advisories; levels of PCBs are elevated in fish causing an impairment lakewide.

- **Identify causes of problems and sources of critical substances**, and develop or focus programs on reducing the input of substances deemed to be causing the identified use impairments.

- **Coordinate and integrate with existing programs and agencies**. We don't want to reinvent the wheel. The Stage I of the LaMP includes the evaluation of the ecosystem health and identification of sources of problems. Stage II, and stages after that, will include implementation procedures and recommendations that come out of the process. The LaMP process charges us with coordinating and integrating programs and agencies working on Lake Ontario.

- **Develop a constituency for the Lake**. This is an indirect result of the LaMP, but a key one. Without a constituency for the resource — without stewards of the resource — implementing cleanup and protection programs are more difficult for all of us.

Pertinent Questions

How do we implement basinwide programs to reduce critical substances that are causing lakewide use impairments? Some problems are clearly basinwide and beyond the scope of regions or local communities. An example might be inputs of atmospheric contaminants causing problems, but originating out of state. This is the kind of problem the LaMP will allow the Four Parties — the state, provincial and federal agencies — to deal with more effectively.

What about sources that may not necessarily be causing lakewide problems, but certainly cumulatively affect the overall ecosystem health of the basin? We should not ignore the potential for improvement basinwide by chipping away at smaller sources and problems. State and federal governments can facilitate implementation, but cannot effectively accomplish it. This is due to the fact that most implementation of projects and programs that will ultimately improve the Lake Ontario basin ecosystem and the Lake itself have to occur at a lower level; local and regional implementation is needed.

What is wrong with our current approach? What aren't we doing? My contention is that the state and

other agencies involved have done a good job on most statewide issues. A good example is our water program and pollution control efforts for point sources. It is a 20-year effort with real benefits obvious to us. We are doing a fairly good job passing funds, resources, and technologies through to local groups and programs. Our pollution prevention programs are a good example of that. The missing piece here is regional. I do not think we have been able to organize effectively at the regional level to accomplish as much as we have at the statewide, basinwide, or local levels. I define regions here as watersheds. Watersheds cross political boundaries like town and county lines, and Regional DEC boundaries as well. Improving regional or watershed ecosystem health will be the challenge for New York State in the coming years.

Local And Regional Environmental Initiatives

My perception is that local and regional environmental initiatives should mirror the LaMP objectives, but be locally or regionally-based. There are many recent examples of successes along these lines, especially in the Finger Lakes and Central New York region. The Finger Lakes-Lake Ontario Watershed Protection Alliance is a good example. The Genesee River basin management planning effort is another. Examples of local successes include the Friends of the Buffalo River and the Canandaigua Lake watershed planning effort.

This conference is an even better example of the kind of effort that needs to take place across the state on environmental issues. Regional alliances, like the one we're focusing on here, have great potential for having input on and assisting implementation of local and regional programs that will not only solve watershed problems in your backyard, but will ultimately solve the basin's problems, improving Lake Ontario.

Strategy For Implementation

How do we want to develop the LaMP so that local, regional and basinwide implementation makes sense? State and federal agencies should continue to focus on lakewide, big picture issues. We should also support and integrate local and regional efforts that identify causes and sources. We need to depend on local implementation, forcing ourselves to make bottom-to-top connections so that we can better meet our long-term objectives. Local implementation is the key to successful implementation. Twenty years of success stories on the Great Lakes and elsewhere have really been driven by top-down kinds of policy and direction from state and federal agencies. It is time to turn that around.

New York State's LaMP Approach: Basin Teams

We are in the process of establishing basin teams for public involvement in the LaMP process. We should continue to think about the long-term goals of improving Lake Ontario while supporting local and regional efforts. The Lake Ontario LaMP should be a backdrop to the work you are doing in the basin and sub-basins, not to direct what you do, but to integrate what you do into the big picture: Lake Ontario. We'll use the LaMP basin teams to network local and regional alliances across the Lake Ontario basin. This will provide a better forum for information exchange.

Basin teams will help document efforts to improve the basin ecosystem. We hope basin teams will assess what has — and has not — been done, and set priorities for action. We would like the teams to provide input to the LaMP process and network. Teams should think of Lake Ontario as the backdrop to local and regional efforts.

Why do we need each other?

Our potential for both regional and basinwide improvement is better if we work together. We will do that by exchanging ideas, successes and problems. We will hopefully realize a much greater improvement by leveraging all our resources for this effort. State and federal government agencies can no longer be the sole source of funds and resources for these efforts.

How do you get involved?

Today's conference will help you gather information on how to get together with us. The Four Parties are developing a draft LaMP document that will soon be out for public review. Look for announcements and articles on the LaMP public involvement process. You can call my office in Buffalo if you need additional information at (716) 851-7200.

Thanks again for the opportunity.

EPA's Community-Based Environmental Initiatives

Bill Muszynski
Deputy Regional Administrator, USEPA Region II

Thank you for giving me the opportunity to come here today to listen and learn about your programs. I have been with the U.S. Environmental Protection Agency (EPA) since its beginning. As a project engineer, some of my first assignments were in Buffalo, Niagara Falls, and the southern tier, and so I am familiar with this area.

I would like to share with you information about EPA's community-based environmental protection programs, which we call an initiative. I will also talk about a new way we have agreed to work with the states called the Performance Partnership Agreements Program. I will talk about how these concepts and programs mesh with what you are doing here in the Finger Lakes area.

At EPA regional and national levels we have, under Administrator Carole Browner's leadership, undergone a top-to-bottom look at ourselves. Each of the EPA program areas were examined because we realized the way we were organized did not offer flexibility to bridge gaps in programs. Our idea was to design the agency to take a more holistic approach to environmental protection. One of the changes that came out of this self-examination was to build upon the concept of "place-based" environmental programming (which focuses on location) and promote "community-based" environmental protection. You will recognize community-based environmental protection because that is what many of you have been doing for years, and I congratulate you on your start. When an agency wants to be innovative, it takes a good look around to see what strategy is working, and then calls it an initiative, and expands upon it to affect other programs. Community-based projects might focus on an ecosystem, such as a watershed, but the approach can also look at the effects of pollution on a local community, or a piece of a community. One of the most critical differences between community-based protection and what came before it is community involvement throughout the entire process — defining problems, deciding on appropriate solutions, and enabling and assisting in the implementation of solutions.

Our criteria for designating these projects are that they 1) occur on an agency level and 2) focus on a significant ecosystem or a human health problem that has not responded to other approaches. The community-based approach is strategic and involves everyone in the community at the very beginning of the process. There are two ways that we put this type of environmental protection to work. First, there are situations where the EPA, either at the regional or national level, takes the lead or co-lead on the project. In these cases, we look to see if there is a compelling reason for EPA to be the lead as opposed to a state or local community organization. One reason might be that there is an endangered ecosystem that crosses international boundaries, such as Lake Ontario or the Niagara River. Other situations that might favor EPA involvement are when another federal program is involved which needs assistance, or when state or local governments decline to take the lead, or believe it more appropriate for EPA to lead. In the latter type of situation, EPA supports and assists other government agencies and local communities. Local governments in small towns often do not have the resources to conduct monitoring or educational programs, nor should they have to reinvent tools and services that have been developed and refined elsewhere. Tools and techniques can be adapted to work locally, and communities do not have to start from ground zero.

With the adoption of the community-based approach, we recognized we needed a different way to work with the states. We have worked through a variety of mechanisms (e.g., delegations, congresses and authorities) and delegated back to the states. We also had to reconsider our funding programs. When EPA first started, plans talked about burning and grossly polluted rivers; it was easy to identify the water quality problems. The funding priorities were set at a national level, and there was very limited flexibility as to how the states could use the moneys made available through EPA programs.

Recently, Congress passed a budget that gave us the flexibility to have Performance Partnership Agreements with the states that cut across all programs

(e.g., air, water, and hazardous waste) and that give the states more flexibility to merge and mix grant moneys to best and most efficiently meet their needs. The Performance Partnership Agreement process involves a self-assessment by the states. EPA then comes to agreement with the states on how to help meet their needs and where they need our resources most. We have a conditionally approved Performance Partnership Agreement with New York State that focuses on water resources, by the State's choice.

Another key principle of Performance Partnership Agreements is public involvement. The self-assessment performed by the states looks at progress-to-date and challenges for the future. That self-assessment is sent out to the public for comment and, in future generations of Performance Partnership Agreements, Agreements will not be entered into before the public has had an opportunity to respond. When Agreements are formalized, the public will have bought into the program directions the State would like to pursue. That's a very critical piece, because without the buy-in of citizens and local groups, many programs are going to look nice on paper, but are not actually going to achieve much in real life.

The other major focus of a Performance Partnership Agreement is that it moves away from bean counting and emphasizes tackling environmental problems. While there is always a certain amount of bean counting, (e.g., "What is the status of new water permits and how many are issued?"), the real focus of Performance Partnerships is environmental initiatives.

I was involved in the signing of the Four-Party (Declaration of Intent) agreement in 1987 for the Niagara River in which we identified 50 percent as our goal for pollutant reduction. In 1993, we recognized that the science used to set that goal was not developed enough to determine, to anybody's satisfaction, that we were going to achieve a 50 percent reduction. How do we know when the ecosystem is back to "normal"? This question has not been a focus of any of our prior work plans. The Performance Partnership Agreements are designed so that we establish "agreed to"environmental goals and indicators, and use these indictators to measure progress of programs. The three critical components of our new direction are flexibility, citizen participation and an emphasis on ecosystems.

We hope to sign the agreement with New York State shortly, and then form a road map for a short-term future in New York. That will be a one year agreement. If you look through this agreement, you will see it provides for EPA and DEC to co-lead several community-based projects. By co-lead I do not mean that we dictate exactly what is done; I mean that we shepherd that process through, including the continuation and development of the Lake Ontario RAP Implementation Plan. We expect this plan to take a comprehensive, ecosystem approach to restoring and protecting lake waters by reducing several targeted pollutants. Lake Ontario will also benefit from the efforts that are aimed at the Niagara River which contributes about 85% of the lake's tributary flow. The Four-Party agreement commits EPA and DEC to continue efforts to reduce the pollutants entering the Niagara River, including developing a management plan for Lake Erie. It calls for expanding several very successful *Clean Sweep* programs in Lake Ontario counties. This program, spearheaded by Erie County and implemented in 16 western New York counties, has collected and safely disposed of unused agricultural pesticides. In 1994, *Clean Sweeps*, funded in part by EPA and New York State, resulted in disposal of over 29,000 pounds of dioxin, arsenic and pesticides including DDT and chlordane; chemicals that possibly would have gone into the lake had this program not been instituted.

There are several projects where EPA will provide support to New York State, such as the development of Remedial Action Plans for six designated Areas of Concern (AOC) on Lake Ontario. These plans take an ecosystem approach to restoring beneficial uses of the lake. In the case of the Rochester Embayment AOC, the Monroe County Department of Health is the lead agency, and EPA will provide support as necessary.

In the Finger Lakes basin, one of the most promising community-based programs is a multi-agency effort aimed at Owasco, Otisco and Skaneateles Lakes. EPA recently provided about $1,000,000, and we expect another $900,000 will be awarded to this effort this fiscal year. In my discussion group this morning, people were talking about the lack of local funding. This funding was a line-item appropriation to the agency directed for that specific purpose, as opposed to the generic funding which the agency receives. There are many ways that agencies are provided funding, some are in big pots and some are specifically targeted. My guess is that specifically targeted projects get funding because local groups got together and convinced their elected officials that this was a

critical need in that area. The goals of the plan are to expand the use of Best Management Practices (BMPs) among farmers, reduce the amount of point source pollution, develop lake management plans and improve environmental monitoring. The lead for these projects will be the local soil and water conservation districts and the county water quality coordinating committees with support from EPA and DEC. The goal of the education component is to work with farmers to see which BMPs can reduce pollution from their farms and, perhaps, save them money. If we can convince people that we can save them money, in addition to not affecting their operations, we have a key selling point.

Obviously, solutions for each farm will be site-specific. One farm may benefit from the introduction of an integrated pest management program to reduce the use of pesticides, while another might benefit from erosion control or bank stabilization. In addition to lowering pollutant levels in these lakes, we hope that the farm program will be a springboard to introduce similar efforts for all of the Finger Lakes.

To make the best use of government dollars, every effort will be made to use existing information at state and local levels to create a State of the Lake Report for Owasco Lake. Owasco Lake will be the initial focus of the management plan process, which will shift to Otisco and Skaneateles as the project progresses. Gathering of environmental data will go hand-in-hand with meetings with groups and organizations in local watersheds to discuss priority concerns and perceptions about the lakes. Both scientific and community findings will be compiled and available for a public review process. An inter-agency team will work with various local groups to come up with an agreed upon set of recommendations.

The effort to improve monitoring of the lakes will also build upon our existing work and increase our knowledge of the lakes. DEC already does sampling on all eleven of the Finger Lakes; part of the EPA funding will be directed to additional sampling on Owasco, Skaneateles, and Otisco Lakes. More detailed measurements will be made on the optical qualities of the lakes so that we can determine which materials cause changes in lake clarity. Also, the bottom sediments and suspended particulates will be more closely analyzed, so we can get a complete picture of past conditions.

The breakout group I was in this morning talked about the frustration of having to have an urgent problem, or crisis, to call up public attention and get everybody working. I think we need to step back a bit sometimes, and appreciate that there has been tremendous progress made over the last 25 years. Native species such as whitefish and lake trout have made significant comebacks, certainly in Lake Ontario. Summer levels of phosphorus in the lake are now approaching pre-colonial levels. Remediation at hazardous waste sites, although a long and laborious process, has reduced toxic inputs to the Niagara River by at least 25 percent and, in the next few years, I think that number will go up to as much as 80 percent.

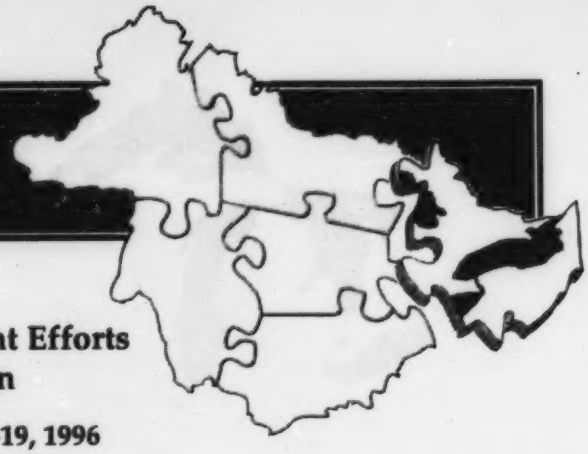
We have come a long way, and success should serve as a bellwether for people and programs. We have turned places around. We do have much work to do. We do need to continue to pinpoint and eliminate additional sources of pollutants. We especially need to stem the loss of wildlife habitat and biodiversity and, clearly, we need to integrate our environmental protection efforts so they are as coordinated and mutually-supportive as the natural systems they are intended to protect.

At EPA, we believe that this new generation of environmental protection is going to work from the ground up. We are mobilizing our resources and trying to adapt our programs, leading when appropriate and following when appropriate, or maybe in the best of instances, getting out of peoples' way so they can get the job done.

I like the reference that was made this morning to the jigsaw puzzle. We do not always have a clear picture of where we want to go, and there are some days I think that not all the pieces have been taken out of the box, but I think it is the best analogy that I have heard for what we all do. Each of us, doing our individual parts, occasionally need to step back and see where the pieces might begin to fit together, or maybe where a piece is missing, so we can re-evaluate the course of action we are taking, and put the puzzle together.

It's been a pleasure being here with you, listening to your success stories, listening to the challenges for all of us and, most importantly, seeing your enthusiasm first-hand. Clearly, if the energy and commitment here is a sign of what is out there, then the future of the Finger Lakes and Lake Ontario is well in hand.

Appendix B
List of Exhibits

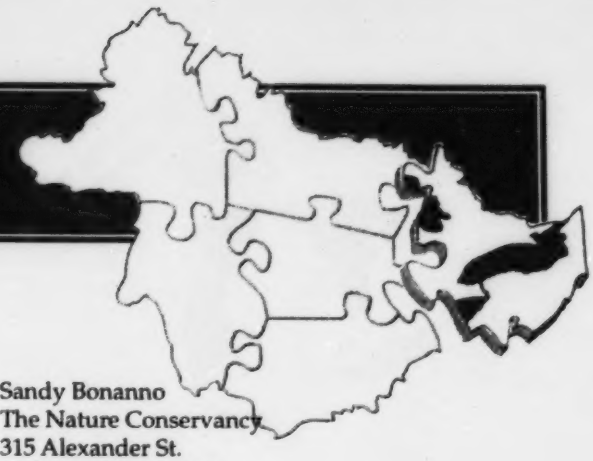


Linking Local Watershed Management Efforts Across The Lake Ontario Basin

October 18-19, 1996
Rochester, NY

- Allegany County Soil and Water Conservation District, Belmont, NY
- Cayuga County Planning Dept., Auburn, NY
- Cayuga County Soil and Water Conservation District, Auburn, NY
- Cayuga County Water Quality Management Agency, Auburn, NY
- Chemung County Soil and Water Conservation District, Horseheads, NY
- Cornell Local Government Program, Cornell University, Ithaca, NY
- Cornell University Section of Ecology and Systematics, Ithaca, NY
- Cross Lake-Seneca River Association, Baldwinsville, NY
- Genesee River Remedial Action Plan, Monroe County Water Quality Management Advisory Committee, Rochester, NY
- Grand Traverse Bay Watershed Initiative, Traverse City, MI
- Great Lakes Natural Resource Center, Sodus Point, NY
- Hamilton Harbour Remedial Action Plan, Hamilton, ON
- International Joint Commission, Windsor, ON
- Keuka Lake Management, Cornell Cooperative Extension-Yates County, Penn Yan, NY
- Lake Champlain Basin Program, Grand Isle, VT
- Monroe County Soil and Water Conservation District, Rochester, NY
- Natural Resources Conservation Service, Syracuse, NY
- The Nature Conservancy, Rochester, NY
- New York State Department of Environmental Conservation, Lake Ontario Lakewide Management Plan, Albany, NY
- New York State Association of Regional Councils, Syracuse, NY
- New York State Department of Environmental Conservation, Division of Water, Remedial Action Planning, Albany, NY
- Ohio Environmental Protection Agency, Columbus, OH
- Onondaga County Environmental Management Council, Syracuse, NY
- Orleans County Soil and Water Conservation District, Albion, NY
- Rouge River Remedial Action Plan, Southeast Michigan
- Stearns and Wheler, LLC, Cazenovia, NY
- Steuben County Water Quality Coordinating Committee, Bath, NY
- Tip of the Mitt Watershed Council, Conway, MI
- Tompkins County Planning Dept., Ithaca, NY
- Upper Susquehanna River Coalition, Owego, NY
- United States Environmental Protection Agency Region V, Community Based Environmental Protection, Chicago, IL

Appendix C
List of Participants



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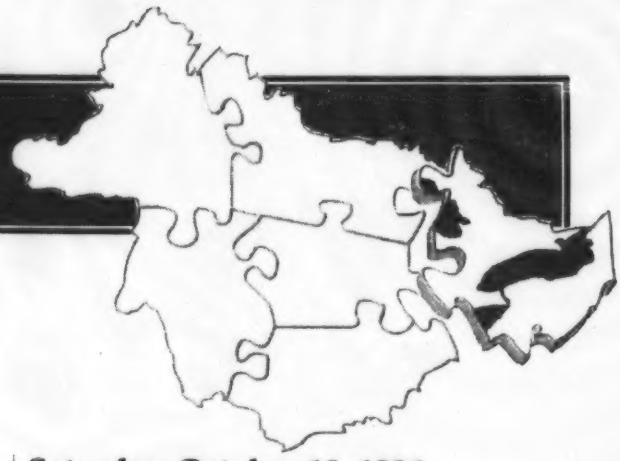
"If citizens and their communities are involved meaningfully, and efforts are made to integrate everyone's contribution to watershed planning and management, the results will be powerful indeed."

—The Honorable George D. Maziarz

Appendix D
Conference Program



Friday, October 18, 1996

10:00 a.m. - 3:00 p.m.
Water Quality Board Business Meeting

1:00 a.m. - 3:00 p.m.
Water Resources Board/FL-LOWPA Business Meeting

4:00 - 5:30 p.m.
Dialogue: Water Quality Board, FL-LOWPA and Guests

The Dialogue will address these two questions:

- What can the Water Quality Board and International Joint Commission do to strengthen community-based programs like the Rochester Embayment RAP and watershed management initiatives for the Finger Lakes?
- What can local and regional institutions, like the Finger Lakes - Lake Ontario Watershed Protection Alliance, do to ensure that local and regional priorities and management efforts are integrated, complementary, and reinforcing with larger, multi-state and binational initiatives like the Lake Ontario Lakewide Management Plan or the Canada-U.S. Virtual Elimination Strategy?

5:45-8:00 p.m.
Public Reception with Exhibits - Student Alumni Union Cafeteria

6:10 p.m.
Address: *IJC's Five Priorities and Why People from Buffalo to Lake Pleasant Should be Concerned*
Alice Chamberlin, Commissioner, International Joint Commission

Saturday, October 19, 1996

9:00 a.m.
Welcome to Rochester
William A. Johnson, Jr., Mayor of the City of Rochester
Richard Burton, Administrator, Monroe County Environmental Health Laboratory and FL-LOWPA

9:06
The Importance of Water Resources in New York State
The Honorable George Maziarz, NYS Senate

9:12
Welcome from the Great Lakes Water Quality Board
Gary Gulezian, Acting Director, U.S. Environmental Protection Agency Great Lakes National Program Office

9:15
Review of Friday's Key Points and Expectations for the Day
Doug Dodge, Ontario Ministry of Natural Resources and Water Quality Board
Richard Burton, Administrator, Monroe County Environmental Health Laboratory and FL-LOWPA

9:25
The Finger Lakes-Lake Ontario Watershed Protection Alliance: Vision for Watershed Management in New York's Lake Ontario Basin
James Skaley, Chair, Water Resources Board of the Finger Lakes-Lake Ontario Watershed Protection Alliance

Saturday, October 19, 1996 cont'd

9:40 a.m.

Introduction to the NYS Lakewide Management Plan for Lake Ontario and the Basin Team Approach to Citizen Involvement
Gerald F. Mikol, Director, NYS Department Environmental Conservation, Region 9

10:00

Charge to the Breakout Groups
Lois New, Assistant to the Commissioner for Public Outreach, NYS Department of Environmental Conservation

10:20-12:00

Breakout Groups: The Challenge of Watershed Management
What obstacles do you face in developing watershed programs and how can they be overcome?
Liaisons will first provide brief overviews on watershed management programs and issues, followed by a facilitated group discussion.

12 Noon

Lunch

12:35 p.m.

Keynote Address: *EPA's Community-Based Environmental Initiatives*
William Muszynski, Deputy Regional Administrator, U.S. Environmental Protection Agency Region II

1:00 p.m.

Exhibits and Networking Time with Representatives at Displays

1:30-3:15

Interactive Panel Discussion: Overcoming Obstacles to Watershed Management

Liaisons and group members present questions, statements and findings from the breakout groups to a panel representing a broad range of perspectives and experience for feedback and discussion. Audience participation is encouraged.

Moderator:
Paul Baker, Host, 13.70 WXXI Radio

Panel:

- Thomas Behlen, Ohio Environmental Protection Agency and Water Quality Board
- Robert N. Brower, Director, Cayuga County Planning Department and FL-LOWPA
- Bruce Carpenter, Executive Director, New York Rivers United
- Renee Forgensi Davison, Director, NYSDEC Region 8
- Joseph DePinto, Director, Director, Great Lakes Program, State University of New York at Buffalo
- Simon Llewellyn, Environment Canada and Water Quality Board
- Sue Senecah, Special Assistant to Senator George Maziarz
- Kyle Stewart, Assistant Director of Government Relations, New York Farm Bureau

3:15

Closing Message
Doug Dodge, Ontario Ministry of Natural Resources and Water Quality Board

3:30

Process Check/Adjourn
Richard Burton, Monroe County Environmental Health Lab and FL-LOWPA

The Finger Lakes - Lake Ontario Watershed Protection Alliance *(FL-LOWPA) is an alliance of 24 New York State counties in the Lake Ontario Basin. FL-LOWPA exists to facilitate the development and implementation of coordinated and dynamic whole-watershed management programs; exchange information on the status of surface water quality in the region; and address local water quality priorities. The Water Resources Board is the governing body of FL-LOWPA and is comprised of representatives from member county agencies, including soil and water conservation districts, planning and health departments, and water quality management agencies.*

The Great Lakes Water Quality Board *of the International Joint Commission (IJC) is the principal advisor to the IJC on all matters relating to the Canada-United States Great Lakes Water Quality Agreement. Members of the WQB are senior program managers from federal, state, and provincial regulatory and resource management programs. Each is charged to serve in their personal and professional capacity, and not represent the agency that employs them. The WQB addresses numerous issues pertaining to the Great Lakes Water Quality Agreement, including sources and pathways of persistent toxic substances, contaminated sediments, and the future of Remedial Action Plans (RAPs) for Great Lakes Areas of Concern.*